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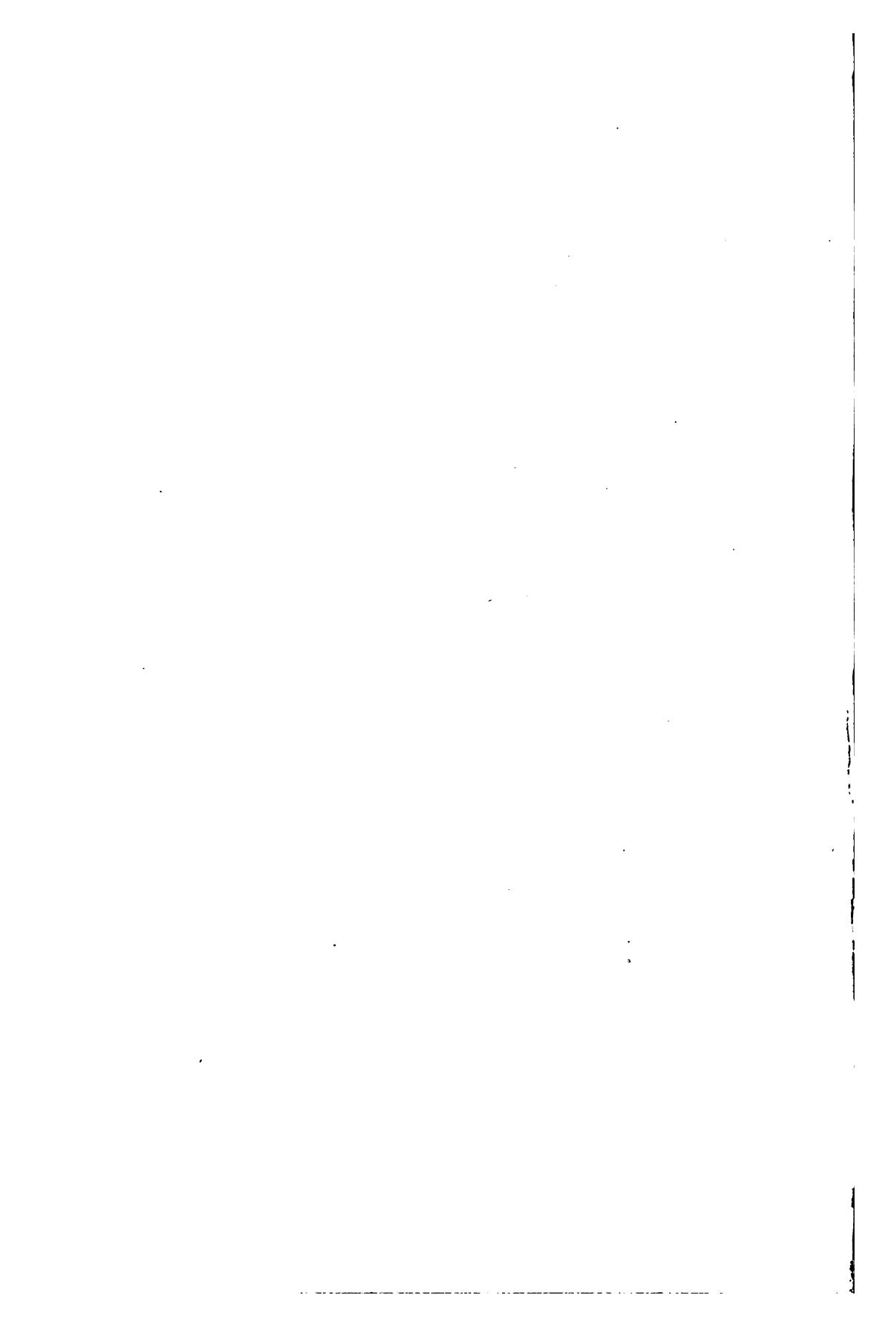
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INDEX OF MINING ENGINEERING LITERATURE

COMPRISING AN
INDEX OF MINING, METALLURGICAL, CIVIL, MECHANICAL,
ELECTRICAL AND CHEMICAL ENGINEERING
SUBJECTS AS RELATED TO MINING
ENGINEERING

ALSO
COSTS OF MINING AND METALLURGICAL
OPERATIONS, ETC.

BY
WALTER R. CRANE, PH.D.

DEAN OF THE SCHOOL OF MINES, AND PROFESSOR OF MINING, THE PENNSYLVANIA
STATE COLLEGE, AUTHOR OF "A TREATISE ON GOLD AND SILVER,"
"ORE MINING METHODS," AND NUMEROUS ARTICLES ON MINING

SECOND VOLUME

FIRST THOUSAND

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PREFACE TO SECOND VOLUME OF INDEX

IN order that an index may be valuable it must be added to from time to time, including references to the new material in the current technical literature and annual proceedings of societies. To this end the Index of Mining Engineering Literature has been enlarged by the preparation of an additional volume covering the list of publications indexed for the first volume, besides a number of other publications. Still other publications would have been incorporated in this volume of the Index had they been available.

The two special features that distinguish this Index from others are cross-references and multiple references. By the former is meant the reference to other subjects under which information can be obtained relative to the special subject in question; and by the latter is meant the breaking up of a paper or article into a number of references which are distributed under appropriate headings.

The special feature of the present volume of the Index is the list of references on cost which are distributed over and cover practically every phase of mining and metallurgical practice. These references to costs are particularly interesting and valuable to the practicing engineer.

As was stated in the former volume of the Index, the work has been the result of the unaided labor of the author, and all errors are, therefore, due to his oversight.

WALTER R. CRANE.

SCHOOL OF MINES,
THE PENNSYLVANIA STATE COLLEGE,
June 1, 1912.

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JOURNALS, TRANSACTIONS AND PROCEEDINGS OF SOCIETIES

- Am. Jour. Min. — American Journal of Mining.
Coll. Engr. — Colliery Engineer.
Coll. Engr. & Met. Miner. — Colliery Engineer and Metal Miner.
Engineering, London.
E. & M. J. — Engineering and Mining Journal.
J. C. M. I. — Journal of the Canadian Mining Institute.
J. C. & M. Soc. S. A. — Journal of the Chemical and Metallurgical Society of South Africa.
J. W. Soc. E. — Journal of the Western Society of Engineers.
J. M. Soc. N. S. — Journal of the Mining Society of Nova Scotia.
Min. Mag. (old series). — Mining Magazine.
Min. Mag. (new series). — Mining Magazine.
Min. Mag., London. — Mining Magazine, London.
M. & M. — Mines and Minerals.
Min. & Sci. Press. — Mining and Scientific Press.
P. C. M. & M. Soc. S. A. — Proceedings of the Chemical, Mining and Metallurgical Society of South Africa.
P. E. Soc. W. Pa. — Proceedings of the Engineering Society of Western Pennsylvania.
P. Soc. P. E. E. — Proceedings of the Society for the Promotion of Engineering Education.
Sch. Mines Quart. — School of Mines Quarterly.
T. A. I. M. E. — Transactions of the American Institute of Mining Engineers.
T. Au. I. M. E. — Transactions of the Australian Institute of Mining Engineers.
T. I. M. E. — Transactions of the Institution of Mining Engineers.
T. I. M. & M. — Transactions of the Institute of Mining and Metallurgy.
T. L. S. M. I. — Transactions of the Lake Superior Mining Institute.
T. N. S. I. M. & M. E. — Transactions of the North Staffordshire Institute of Mining and Mechanical Engineers.
T. F. C. M. I. — Transactions of the Federated Canadian Mining Institute.
U. S. G. S. Publications. — United States Geological Survey Publications, except Water Supply Papers.

PUBLICATIONS INCOMPLETELY INDEXED

Reports of Surveys, Proceedings of Societies, etc.

- Ann. Min. Rept. N. S. Wales. — Annual Mining Report of New South Wales.
Cal. Miners' Assoc. Ann. — California Miners' Association Annual.
Columbia Engr. — Columbia Engineer.
P. I. C. E. — Proceedings of the Institute of Civil Engineers.

xiv PUBLICATIONS INDEXED AND ABBREVIATIONS

- Rept. Census Office, Mines and Quarries. — Report Census Office, Mines and Quarries.
Rept. Insp. Mines Pa. — Report of the Inspector of Mines of Pennsylvania.
Rept. Zinc Comm. Canada. — Report of the Commission Appointed to Investigate the Zinc Resources of British Columbia, etc.
Second Geol. Sur. Pa. — Second Geological Survey of Pennsylvania.
The Mines of the West. — Raymond.
The Univ. Geol. Surv. of Kans. — The University Geological Survey of Kansas.
Univ. of Ill. Bull. — University of Illinois Bulletin.
U. S. Bureau of Mines. — United States Bureau of Mines.

JOURNALS

- Am. Engr. & R.R. Jour. — American Engineer and Railroad Journal.
Coll. Guard. — Colliery Guardian, London.
Concrete and Constructional Engineering, London.
Electrochemical Industry.
Eng. Mag. — Engineering Magazine.
Eng. News. — Engineering News.
Eng.-Cont. — Engineering Contracting.
Mining World.

BOOKS

- Anthracite Coal Industry, Roberts.
Aerial or Wire Rope Tramways, Willis-Taylor.
Coll. Working and Management, Bulman and Redymayne.
Diamond Drilling, Denny.
Earthwork and Its Cost, Gillette.
Gold Min. & Mill. W. Aus. — Gold Mining and Milling Western Australia, Charleton.
Kents' Mech. Engrs. Pocket-Book. — Kents' Mechanical Engineers' Pocket-Book.
Mech. Eng. of Coll. — Mechanical Engineering of Collieries, Futers.
Mine Building Construction.
Miners Pocket-Book, Lock.
Ore Dressing, Richards.
P. C. M. — Practical Coal Mining, Ed. W. S. Boulton.
R.R. Construction. — Railroad Construction, Webb.
Sci. Am. Supp. — Scientific American Supplement.
The Gold Mines of the Rand, Hatch and Chalmers.
The Witwatersrand Goldfields, Truscott.
The Mechanical Handling of Material, Jimmer.
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COLLIERY DISASTERS. By F. A. Hill. E. & M. J., vol. 86, p. 18. 2 columns.

See also COAL DUST AS AN EXPLOSIVE, MINE FIRES, AND MINE EXPLOSIONS.

MINE ACCIDENTS. By J. T. Quine. T. L. S. M. I., vol. 14, p. 71. 10½ pages.

MINE ACCIDENTS. By S. Reynolds. M. & M., vol. 29, p. 412. 3 columns.

ACCIDENTS IN STOPES. E. & M. J., vol. 87, p. 300. ¾ column.

MINING ACCIDENTS IN CORNWALL. Min. Mag., London, vol. 1, p. 119. 6 columns. I.

ACCIDENTS IN THE COAL MINES OF GREAT BRITAIN. E. & M. J., vol. 89, p. 975. 4 columns.

COAL-MINE ACCIDENTS IN GREAT BRITAIN. E. & M. J., vol. 89, p. 1029. 2 columns.

COAL-MINING ACCIDENTS IN 1907. M. & M., vol. 29, p. 326. ¼ column.

METAL-MINING FATALITIES IN IDAHO, FOR 1910. M. & M., vol. 31, p. 700. 1 column.

COAL-MINE DISASTERS IN NORTH AMERICA FROM 1869 TO 1910. E. & M. J., vol. 90, p. 949. Table.

MINE-ACCIDENT INVESTIGATIONS. By G. S. Rice. M. & M., vol. 31, p. 282. 6 columns.

MINE-ACCIDENT INVESTIGATION OF THE UNITED STATES GEOLOGICAL SURVEY. By G. S. Rice. J. W. Soc. E., vol. 14, p. 784. 37 pages. I.

MINE ACCIDENTS AND THE BUREAU OF MINES. By G. S. Rice. Min. & Sci. Press, vol. 101, p. 471. 5 columns.

See also BUREAU OF MINES under MINING.

ECONOMY AS RELATED TO MINE ACCIDENTS. By H. E. Coll. E. & M. J., vol. 87, p. 359. 8 columns.

LEGISLATION ON ACCIDENTS. Min. & Sci. Press, vol. 20, p. 33. ¾ column.

COAL TRUSTS AND SAFE MINING (?). By W. H. Reynolds. M. & M., vol. 31, p. 633. 5 columns.

RESULTS OF INQUIRIES INTO RECENT MINE DISASTERS. By F. W. Parsons. E. & M. J., vol. 85, p. 259. 14 columns. I.

Loss of Life in Mining

DEATH FROM ACCIDENTS IN MINES. P. C. M. & M. Soc. S. A., vol. 7, p. 171. 5 columns.

FATAL ACCIDENTS IN COAL MINES. By F. L. Hoffman. E. & M. J., vol. 85, p. 34. 8½ columns.

FATAL ACCIDENTS IN COAL MINES OF AMERICA. By F. L. Hoffman. E. & M. J., vol. 86, p. 1207. 12½ columns.

FATAL ACCIDENTS IN COAL MINES OF NORTH AMERICA. By F. L. Hoffman. E. & M. J., vol. 88, p. 1253. 10 columns.

FATAL ACCIDENTS IN AMERICAN METAL MINES. By F. L. Hoffman. E. & M. J., vol. 89, p. 511. 7 columns.

FATAL ACCIDENTS IN THE COAL MINES OF NORTH AMERICA. By F. L. Hoffman. E. & M. J., vol. 90, p. 1313. 9½ columns.

DATA ON MORTALITY AND MORBIDITY OF MINERS. By F. L. Hoffman. E. & M. J., vol. 89, p. 1321, 9½ columns; vol. 90, p. 23. 10 columns.

COAL-MINING FATALITIES IN BELGIUM. By F. L. Hoffman. E. & M. J., vol. 90, p. 519. 5½ columns. D.

Cause of Accidents

COAL-MINE ACCIDENTS: Their Causes and Prevention. By C. Hall and W. O. Snelling. U. S. G. S., Bull. 333, 21 pages, 1907.

CAUSE OF ACCIDENTS. M. & M., vol. 31, p. 410. 4 columns.

CAUSES OF ACCIDENTS IN RAND MINES. Min. & Sci. Press, vol. 97, p. 193. ¼ column.

CAUSE OF MINE EXPLOSIONS. By James Ashworth. Colliery Engineer, vol. 16, p. 127.

INSTANTANEOUS OUTBURSTS OF GAS IN SHAFT SINKING. E. & M. J., vol. 88, p. 1271. 1½ columns.

See also OCCURRENCE OF GASES IN COAL MINES.

ACCIDENTS TO MULE DRIVERS. M. & M., vol. 29, p. 288. ¼ column.

ACCIDENTS FROM THE DRAWING OF PROPS. E. & M. J., vol. 87, p. 359. 1½ columns.

FATALITIES FROM ROBBING PILLARS. E. & M. J., vol. 87, p. 19. 2 columns.

See also DRAWING OF ROBBING PILLARS.

ACCIDENTS FROM EXPLOSIVES. T. L. S. M. I., vol. 14, p. 75. 3 pages.

ACCIDENTS WITH EXPLOSIVES. E. & M. J., vol. 87, p. 299. 1 column.

ACCIDENTS FROM USE OF EXPLOSIVES. By J. W. Stark. M. & M., vol. 29, p. 381. 4½ columns.

ACCIDENTS IN LOADING AND FIRING EXPLOSIVES. M. & M., vol. 29, p. 382. 2 columns.

See also METHODS OF FIRING EXPLOSIVES AND TAMPING and TAMPING MATERIALS.

EXPLOSIVES AND MINING ACCIDENTS. T. Au. I. M. E., vol. 9, p. 31, 5 pages; p. 42. 10 pages.

COMMON CAUSES OF ACCIDENTS FROM EXPLOSIVES IN MINES. By J. R. Godfrey. T. Au. I. M. E., vol. 9, p. 30. 32 pages.

ACCIDENTS DUE TO FLAMING EXPLOSIVES. E. & M. J., vol. 87, p. 300. 1 column.

ACCIDENTS CAUSED BY MISSED HOLES. E. & M. J., vol. 87, p. 299. 1 column.

See also METHODS OF FIRING EXPLOSIVES.

ACCIDENTS IN TRANSPORTING EXPLOSIVES. M. & M., vol. 29, p. 381. 1½ columns.

See also HANDLING EXPLOSIVES.

ACCIDENTS IN STORING EXPLOSIVES. M. & M., vol. 29, p. 381. 1½ columns.

See also BLASTING IN MINES AND EXPLOSIVES FOR MINING PURPOSES.

DANGERS ATTENDING USE OF ELECTRICITY IN COAL MINES. By J. Ashworth. E. & M. J., vol. 88, p. 123. 2½ columns.

ELECTRIC SHOCKS AND FIRES IN MINES. E. & M. J., vol. 87, p. 317. 1½ columns.

ELECTRIC SHOCKS IN MINES. By I. F. Walker. M. & M., vol. 31, p. 493, 3½ columns; p. 543, 3 columns; p. 637. 4 columns.

DEATH FROM ELECTRIC SHOCK AT CLIFTON COLLIERY, ENGLAND. By S. F. Walker. E. & M. J., vol. 88, p. 779. 3 columns. I.

AN ACCIDENT CAUSED BY AN ELECTRIC COAL CUTTER. E. & M. J., vol. 88, p. 452. 2 columns. I.

- CARELESSNESS WITH ELECTRICITY.** E. & M. J., vol. 90, p. 726. 1½ columns.
- SAFE USE OF ELECTRICITY IN GASEOUS MINES.** M. & M., vol. 31, p. 126. 1 column.
- See also **ELECTRICITY IN THE MINE.**
- PECULIAR MINE ACCIDENT: A Fire Resulting from Substituting Crude Petroleum for Car Lubricating Oil.** By J. Elliott. M. & M., vol. 29, p. 488. 1½ columns.
- DANGEROUS GASES CAUSING MINE ACCIDENTS.** T. Au. I. M. E., vol. 9, p. 37. 2 pages.
- See also **MINE EXPLOSIONS AND MINE GASES.**
- CARELESSNESS IN MINING: Cause of Accidents.** E. & M. J., vol. 89, p. 526. ½ column.
- CARELESSNESS IN MINES CAUSE OF ACCIDENTS.** M. & M., vol. 30, p. 355. ½ column.
- COAL-MINE ACCIDENTS ARE DUE TO VIOLATIONS OF MINE LAWS.** E. & M. J., vol. 88, p. 1176. 1½ columns.
- MINE ACCIDENTS DUE TO DISREGARD OF LAW.** E. & M. J., vol. 89, p. 578. 1 column.
- THE RESPONSIBILITY FOR RECENT COAL-MINE DISASTERS.** E. & M. J., vol. 85, p. 969. 3½ columns.
- ACCIDENTS DUE TO LAX DISCIPLINE.** E. & M. J., vol. 90, p. 1044. ½ column.
- See also **DISCIPLINE IN MINES.**
- MINE-ACCIDENT PREVENTION.** By J. J. Rutledge. M. & M., vol. 31, p. 276. 4½ columns.
- A CHECK SYSTEM FOR GASEOUS MINES.** By O. Cartledge. M. & M., vol. 30, p. 331. 1 column.
- See also **MINE ATMOSPHERE AND GASES.**
- PRECAUTIONARY SUGGESTIONS TO ALABAMA COAL MINERS: Regarding Accidents.** E. & M. J., vol. 89, p. 478. 2 columns.
- PREVENTION OF ACCIDENTS.** M. & M., vol. 31, p. 412. 1 column.
- PREVENTION OF ACCIDENTS IN MINING.** T. L. S. M. I., vol. 14, p. 93. 1 page.
- PREVENTION OF ACCIDENTS IN METAL MINES.** By C. T. Rice. E. & M. J., vol. 87, p. 298. 14½ columns. I.
- PREVENTION OF MINE ACCIDENTS.** Min. & Sci. Press, vol. 97, p. 881. 1½ columns.
- THE PREVENTION OF ACCIDENTS IN COAL MINING.** By E. H. Cox. E. & M. J., vol. 88, p. 410. 9½ columns.
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. E. & M. J., vol. 88, p. 1228. 2½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS.** M. & M., vol. 30, p. 308. 5½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS.** By J. A. Holmes. M. & M., vol. 30, p. 329. 1½ columns.
- PREVENTION OF MINE ACCIDENTS.** By J. Mitchell. M. & M., vol. 30, p. 346. ½ column.
- THE PREVENTION OF MINE ACCIDENTS.** By R. H. Coulson. E. & M. J., vol. 90, p. 1043. 3 columns.
- PREVENTION OF MINE ACCIDENTS.** E. & M. J., vol. 86, p. 1088. 21 columns.
- ACCIDENTS: Preventative Measures.** P. C. M. & M. Soc. S. A., vol. 9, p. 247. 1½ columns.

Protection in Mining

- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. Min. & Sci. Press, vol. 100, p. 673. 3 columns.
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By Dr. J. A. Holmes. Eng. News, Dec. 9, 1909.
- CAUSE AND PREVENTION OF EXPLOSIONS.** Colliery Guardian, vol. 59, p. 326.

- SAFETY MEASURES IN MINING.** By Donald Macaulay and L. G. Irvine. P. C. M. & M. Soc. S. A., vol. 6, p. 148, 17 columns; p. 197, 3 columns; p. 226, 4 columns; p. 251, 4 columns; p. 292, 32½ columns; p. 336, 5½ columns; p. 369, 1 column; vol. 7, p. 10, 3½ columns; p. 36, 15 columns; p. 76, 14 columns; p. 111, 18 columns; p. 159, 32 columns.
- TO PREVENT BLOWN-OUT SHOTS.** P. C. M. & M. Soc. S. A., vol. 9, p. 319. 2 columns.
- See also **BLASTING IN MINES.**
- HOW EUROPEAN COLLIERIES ARE SAFEGUARDED.** E. & M. J., vol. 89, p. 829. 7½ columns.
- AUTOMATIC PROTECTIVE SWITCH GEAR FOR COLLIERY SERVICE.** By E. B. Wedmore. T. I. M. E., vol. 38, p. 416. 14 pages. I.
- THE BENNETT SAFETY GEAR.** By S. G. Bennett. T. I. M. E., vol. 38, p. 647. 6 pages. I.
- WHITE WASHING A COAL MINE.** By S. Reynolds. M. & M., vol. 30, p. 16. 2 columns.
- LEVYING OF A FINE FOR EVERY FATAL ACCIDENT.** E. & M. J., vol. 87, p. 300. 1 column.
- TESTING ROOFS IN MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 48. ½ column.
- See also **FALLS OF ROOF AND WALLS IN MINES.**
- GOOD TIMBERING AND DEATH RATE.** P. C. M. & M. Soc. S. A., vol. 8, p. 133. ½ column.
- See also **MINE SUPPORT.**
- SAFE USE OF ELECTRICITY IN COAL MINING.** By G. R. Wood. E. & M. J., vol. 88, p. 19. 7½ columns.
- ELECTRIC SHOCKS IN COAL MINES.** By S. F. Walker. E. & M. J., vol. 90, p. 725. 15 columns.
- See also **CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.**
- PREVENTION OF SHOCKS IN COAL MINES.** E. & M. J., vol. 90, p. 728. ½ column.
- AUTOMATIC FIRE PROTECTION.** By W. A. Neracher. P. E. Soc. W. Pa., vol. 24, p. 321. 17 pages.
- MEANS OF PREVENTING MINE FIRES.** M. & M., vol. 31, p. 274. 1 column.
- See also **MINE FIRES.**
- ON SAFETY APPLIANCES AND PRECAUTIONS NECESSARY IN MINES.** By J. R. Godfrey. T. Au. I. M. E., vol. 6, p. 1. 33 pages. I.
- THE PREVENTION OF MINE ACCIDENTS: Report of Committee to American Mining Congress.** E. & M. J., vol. 90, p. 601. 19 columns.
- SAFETY IN MINES AND MILLS.** E. & M. J., vol. 90, p. 11. 2 columns.
- SAFETY PRECAUTIONS IN ALABAMA COAL MINES.** E. & M. J., vol. 88, p. 780. 1 column.
- SAFETY PRECAUTIONS IN ALABAMA COAL MINES.** By E. H. Cox. E. & M. J., vol. 89, p. 1165. 9½ columns. I.
- SAFETY APPLIANCES IN GERMAN MINES.** By R. W. Voigt. M. & M., vol. 30, p. 460. 3 columns. I.
- See also **SAFETY CATCHES FOR MINE CAGES AND SHAFT-CLOSING ARRANGEMENTS.**
- See also **OVERWINDING AND ITS PREVENTION, AND SAFETY CATCHES FOR MINE CAGES.**
- See also **MINE SUPPORT: Conditions Affecting.**
- See also **COST OF DAMS, etc.**
- Rescue Work in Mines**
- RESCUE WORK IN MINES.** Min. & Sci. Press, vol. 98, p. 349. 2 columns. I.
- MINE RESCUE WORK.** Min. & Sci. Press, vol. 101, p. 81. 7 columns. I.
- RESCUE WORK IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 100. 1½ columns.
- RESCUE WORK AT HAMSTEAD COLLIERY.** By D. J. Pierce. E. & M. J., vol. 86, p. 5. 1½ columns. I.

- RESCUE WORK AFTER MINE EXPLOSIONS.** E. & M. J., vol. 90, p. 82. 3½ columns.
- RESCUE WORK AT THE ST. PAUL MINE, CHERRY, ILLINOIS.** E. & M. J., vol. 88, p. 1073. 1½ columns.
- THE POSSIBILITIES OF RESCUE WORK IN CONNECTION WITH MINE EXPLOSIONS AND FIRES.** By J. S. Haldane. T. I. M. E., vol. 39, p. 458. 27 pages. I.
- RESCUING THE MEN ENTOMBED AT ALPHA SHAFT NEAR ELY, NEVADA.** By E. W. Walter. E. & M. J., vol. 85, p. 407. 3½ columns.
- TO AVOID RESCUE WORK.** M. & M., vol. 30, p. 593. 1 column.
- PROVISIONS FOR MINE RESCUE IN BRITISH COLUMBIA.** E. & M. J., vol. 90, p. 201. 1 column.
- COLLIERY RESCUE BRIGADES IN GREAT BRITAIN.** M. & M., vol. 31, p. 667. ½ column.
- SUGGESTIONS FOR THE ORGANIZATION OF COLLIERY RESCUE BRIGADES.** By Sgt. A. T. Winborn. T. I. M. E., vol. 37, p. 81, 19 pages. I.; p. 294, 20 pages.
- THE AEROLITH RESCUE APPARATUS.** M. & M., vol. 31, p. 521. 3½ columns. I.
- A NEW BREATHING APPARATUS.** M. & M., vol. 31, p. 759. 2½ columns. I.
- TISSOT BREATHING APPARATUS FOR RESCUE WORK.** By H. Briggs. E. & M. J., vol. 89, p. 1027. 7¼ columns. I.
- AEROLITH BREATHING APPARATUS.** By Alfred Gradenwitz. E. & M. J., vol. 85, p. 105. 2 columns. I.
- THE WEG BREATHING APPARATUS.** E. & M. J., vol. 85, p. 366. 2 columns. I.
- BREATHING APPLIANCES FOR MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 65. 2 columns.
- ROYAL COMMISSION ON MINES AND BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 94. 3 columns.
- POINTS IN BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 397. ½ column.
- REQUIREMENTS OF A BREATHING APPARATUS FOR USE IN MINES.** By W. E. Mingramm. T. A. I. M. E., vol. 39, p. 341. 9½ pages. I.
- THE USE OF BREATHING APPARATUS AT A MINE FIRE IN CAPE BRETON, WITH SOME NOTES ON THE CENTRAL RESCUE STATION OF THE DOMINION COAL COMPANY, LIMITED, AT GLACE BAY, CAPE BRETON, NOVA SCOTIA.** By F. W. Gray and James McMahon. T. I. M. E., vol. 37, p. 100. 18 pages.
- BREATHING APPARATUS FOR USE IN MINES: Discussion.** T. I. M. E., vol. 36, p. 53. 3 pages.
- RESPIRATION DEVICES FOR MINES: The Artificial Regeneration of Air for Respiration in Life-Saving Apparatus for Mining Service.** P. C. M. & M. Soc. S. A., vol. 5, p. 191. 2 columns.
- SELF-CONTAINED RESPIRATING APPARATUS IN MINES.** By A. E. Davidson. M. & M., vol. 29, p. 118. ½ column.
- OXYGEN HELMETS USED AT MINE FIRES.** By O. Callidge. M. & M., vol. 30, p. 712. 1 column.
- OXYGEN HELMETS USED AT MINE FIRE.** By T. A. Carraher. M. & M., vol. 31, p. 161. 1½ columns. I.
- LIQUID OXYGEN FOR RESCUE WORK IN COAL MINES.** By A. Gradenwitz. E. & M. J., vol. 88, p. 923. 4½ columns. I.
- TESTS OF LIFE-SAVING APPLIANCES FOR MINES.** By R. Grimshaw. E. & M. J., vol. 87, p. 1192. 2 columns.
- RESCUE APPARATUS IN AUSTRIAN MINES.** E. & M. J., vol. 87, p. 414. ½ column.
- RESCUE APPARATUS FOR MINES.** E. & M. J., vol. 86, p. 8. 1½ columns.
- RESCUE APPARATUS IN COAL MINES.** By W. E. Mingramm. E. & M. J., vol. 85, p. 900. 5 columns. I.

- RESCUE APPARATUS FOR USE IN COAL MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 160. 2½ columns.
- RESCUE APPLIANCES: Lessons from Glencoe.** By H. Kestner. P. C. M. and M. Soc. S. A., vol. 8, p. 306, 11 columns, I.; p. 385, 1 column; vol. 9, p. 21, ¾ column; p. 41, 8½ columns, I.
- ON THE PRACTICAL USE AND VALUE OF COLLIERY RESCUE: Apparatus, and the Organization of Rescue Corps.** By Geo. B. Walker. T. I. M. E., vol. 36, p. 536. 19 pages.
- DREAGER LIFE-SAVING APPARATUS IN A MINE FIRE.** Min. & Sci. Press, vol. 97, p. 401. ¾ column.
- A NEW SMOKE HELMET FOR MINE-FIRE FIGHTING.** M. & M., vol. 31, p. 281. ¼ column. I.
- THE ANACONDA FIRE HOOD.** By R. N. Bell. M. & M., vol. 29, p. 175. 2 columns. I.
- See also **MINE FIRES.**
- THE ANACONDA PROTECTIVE HOOD.** By R. N. Bell. E. & M. J., vol. 86, p. 708. 2 columns. I.
- REGENERATION OF AIR FOR SUBMARINES WITH FUSED SODIUM PEROXIDE.** P. C. M. & M. Soc. S. A., vol. 7, p. 51. 1 column.
- EUROPEAN LAWS REGARDING BREATHING APPARATUS.** M. & M., vol. 31, p. 413. ¾ column.
- COAL COMPANIES ESTABLISH RESCUE STATIONS.** E. & M. J., vol. 87, p. 951. 2 columns.
- MINE RESCUE LABORATORY.** By R. Y. Williams. M. & M., vol. 29, p. 537. 2 columns. I.
- AN ENGLISH RESCUE STATION.** M. & M., vol. 29, p. 100. 3 columns. I.
- MINE RESCUE STATIONS AND MINE ACCIDENTS.** E. & M. J., vol. 89, p. 281. 4 columns.
- RESCUE STATION AT LEISENRING No. 1.** By C. B. Franks. M. & M., vol. 30, p. 599. 2½ columns.
- RESCUE STATIONS IN ILLINOIS.** By R. Y. Williams. M. & M., vol. 31, p. 214. 5 columns. I.
- MINE RESCUE STATIONS IN ILLINOIS.** By R. Y. Williams. E. & M. J., vol. 90, p. 176. 7½ columns. I.
- RESCUE STATIONS IN ILLINOIS COAL-MINING LOCALITIES.** By R. Y. Williams. J. W. Soc. E., vol. 15, p. 655. 23½ pages. I.
- See also **PROTECTION IN MINING.**
- Compensation for Injuries**
- MINER'S ACCIDENT RELIEF FUND.** E. & M. J., vol. 90, p. 25. ¾ column.
- COMPENSATION TO WORKERS FOR ACCIDENTAL INJURIES.** By M. M. Duncan. E. & M. J., vol. 88, p. 519. 4½ columns.
- COMPENSATION FOR INDUSTRIAL ACCIDENTS.** By D. Ross. Min. & Sci. Press, vol. 101, p. 744. 5½ columns.
- COMPENSATION TO WORKMEN IN CASE OF INJURIES.** By M. M. Duncan. T. L. S. M. I., vol. 14, p. 47. 6 pages.
- COMPENSATION FOR INJURY.** By R. P. Tarr. M. & M., vol. 31, p. 410. 6½ columns.
- TAX FOR COMPENSATION TO INJURED.** P. C. M. & M. Soc. S. A., vol. 9, p. 246. Note.
- See also **WORKMAN'S AID, COMPENSATION AND INSURANCE.**
- MINER'S BENEFIT FUND.** E. & M. J., vol. 90, p. 1013. ½ column.
- HOMESTAKE AID FUND.** E. & M. J., vol. 90, p. 309. 1½ columns.
- INSURANCE AND MINE ACCIDENTS.** By G. W. Traer. Min. & Sci. Press, vol. 99, p. 717. 2 columns.
- ACCIDENT LIABILITY AND COMPENSATION.** E. & M. J., vol. 90, p. 23. 1½ columns.
- INDUSTRIAL ACCIDENTS AND EMPLOYEES LIABILITY LAWS.** By D. Ross. Min. & Sci. Press, vol. 99, p. 716. 2½ columns.

LIABILITY FOR INDUSTRIAL ACCIDENTS.
By Sion B. Smith. M. & M., vol. 31,
p. 501. 5 columns.

**POSSIBILITIES OF A NEW LIABILITY
LAW.** By S. Reynolds. M. & M.,
vol. 31, p. 532. 7½ columns.

See also **WORKMEN'S AID, COMPEN-
SATION AND INSURANCE.**

First Aid in Mining Accidents

**FIRST AID TO THE INJURED IN COAL
MINES.** By M. J. Shields.
Coal Mining Supplement, E. & M. J.,
vol. 88, p. 42. 8 columns. I.

FIRST AID FOR INJURED SPINES. By
T. C. Harvey. M. & M., vol. 31,
p. 538. 1½ columns. I.

**SUGGESTIONS FOR ORGANIZED UNDER-
GROUND AMBULANCE WORK.** T. I.
M. E., vol. 37, pp. 42-44, 218-223.

**FIRST-AID CORPS IN ALABAMA COAL
MINES.** E. & M. J., vol. 89, p.
1166. ½ column.

WILL FIRST AID CORPS LAST? M. &
M., vol. 29, p. 407. 1 column.

ORGANIZATION OF FIRST-AID CORPS.
By M. J. Shields. M. & M., vol. 29,
p. 379. 3½ columns.

**FIRST-AID WORK IN NEW SOUTH
WALES.** M. & M., vol. 30, p. 366.
½ column.

THE FIRST AID MOVEMENT. By H.
H. Stoeck. M. & M., vol. 29, p. 243.
11 columns. I.

FIRST-AID WORK AT COAL MINES.
By J. H. Ketner. M. & M., vol. 31,
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METHODS OF RESUSCITATION. P. C. M.
& M. Soc. S. A., vol. 10, p. 303.
2 columns.

**RESUSCITATION AFTER ELECTRIC
SHOCK.** M. & M., vol. 30, p. 91.
1½ columns.

See also **CAUSE OF ACCIDENTS, AND
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**APPARATUS FOR CONVEYING WOUNDED
MEN FROM STOPES.** E. & M. J., vol.
89, p. 1263. 1 column. I.

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FIRST-AID CONTEST AT INKERMEN.
M. & M., vol. 30, p. 225. 3 col-
umns. I.

FIRST-AID CONTEST. By C. A. Graves.
M. & M., vol. 29, p. 172. 2 col-
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FIRST-AID CONTESTS. M. & M., vol.
31, p. 197. 8½ columns. I.

READING FIRST-AID FIELD DAY. By
H. H. Stoeck. M. & M., vol. 30,
p. 121. 4 columns. I.

See also **PROTECTION IN MINING.**

Falls of Roof and Walls in Mines

FALLS IN SHAFTS: Shaft Accidents.
By F. H. Wynne. T. I. M. E., vol.
38, p. 653. 18 pages.

**FALL OF LABORER DOWN THE RED
JACKET SHAFT.** E. & M. J., vol. 90,
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& M., vol. 29, p. 121. 2 columns. I.

**ACCIDENTS CAUSED BY FALL OF ROCK
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**ACCIDENTS CAUSED BY FALLING ROCK
IN METAL MINES.** E. & M. J., vol.
87, p. 301. 1½ columns.

**SUMMARY OF THE "REPORT OF A COM-
MITTEE APPOINTED BY THE ROYAL
COMMISSION ON MINES TO INQUIRE
INTO THE CAUSES OF AND MEANS OF
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OF GROUND, UNDERGROUND HAUL-
AGE, AND IN SHAFTS: Shaft Acci-
dents.** By F. H. Wynne. T. I. M.
E., vol. 38, p. 653. 18 pages.

**SUMMARY OF THE "REPORT OF A COM-
MITTEE APPOINTED BY THE ROYAL
COMMISSION ON MINES TO INQUIRE
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AGE, AND IN SHAFTS," Part II:
Falls of Roof and Sides.** By W.
Charlton and F. H. Wynne. T. I.
M. E., vol. 39, p. 378. 20 pages.

THE ALPHA SHAFT DISASTER. By W. S. Larsh. *M. & M.*, vol. 29, p. 104. 4 columns. I.

See also **SUBSIDENCE IN MINE WORKINGS.**

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Inundation in Mines

DANGER OF INRUSHES OF SURFACE WATER. *E. & M. J.*, vol. 90, p. 973. 4½ columns. I.

TAPPING MINE WATER UNDER GREAT PRESSURE. By Robert Sibley. *E. & M. J.*, vol. 85, p. 562. 9½ columns. I.

FLOOD DAMAGE AT THE GREAT FALLS SMELTER, MONTANA. By F. S. Shewell. *Min. & Sci. Press*, vol. 97, p. 57. 2½ columns. I.

THE MONTEREY FLOOD AND SAN LUISITO BRIDGE. By S. J. Lewis. *Min. & Sci. Press*, vol. 99, p. 494. 4½ columns. I.

RECLAIMING A FLOODED GYPSUM MINE. By E. H. Fishack. *E. & M. J.*, vol. 85, p. 1098. 3 columns. I.

DIVERS IN MINING. *P. C. M. & M. Soc. S. A.*, vol. 7, p. 57. 2½ columns; *The Engineer*, June 1, 1906, p. 373.

See also **CAUSE OF ACCIDENTS.**

See also **COST OF DAMS, etc.**

Coal Dust as an Explosive Agent

DUST IN MINES. *Colliery Engineer*, vol. 10, p. 152; vol. 12, pp. 113, 196, 268; vol. 13, pp. 6, 151.

THE BAROMETRIC AND TEMPERATURE CONDITIONS AT THE TIME OF DUST EXPLOSIONS IN THE APPALACHIAN COAL MINES. By N. H. Mannakee. *T. A. I. M. E.*, vol. 40, p. 655. 12 pages.

See also **MINE GASES, AND BAROMETRIC PRESSURE.**

DUST EXPLOSIONS IN COAL MINES. By F. Bache. *T. A. I. M. E.*, vol. 40, p. 667, 6 pages; *Discussion*, p. 907, 2½ pages.

DUST EXPLOSION AT THE GARDANNE MINE, FRANCE. *T. I. M. E.*, vol. 37, p. 696. 2 pages.

EXPLOSIONS FROM COAL DUST IN ENGLISH MINES. By James Stead. *Mining World*, June 18, 1910.

COAL-DUST AND COLLIERY EXPLOSIONS. *Colliery Engineer*, vol. 9, p. 80.

COAL DUST A CAUSE OF COLLIERY EXPLOSIONS. *Colliery Engineer*, vol. 8, p. 83.

ANOTHER EXPLOSION IN WHICH COAL DUST WAS AN IMPORTANT ELEMENT. *Colliery Engineer*, vol. 9, p. 209.

COAL-DUST EXPLOSIONS: Their Origin and Extension. By John Verner. *Coll. Engr. & Met. Miner*, vol. 17, p. 26.

DUST AS A FACTOR IN MINE EXPLOSIONS. *E. & M. J.*, vol. 87, p. 14. 1 column.

COAL DUST AS A FACTOR IN MINE EXPLOSIONS. By H. M. Payne. *E. & M. J.*, vol. 86, p. 9. 16½ columns. D.

DUST AS A FACTOR IN MINE EXPLOSIONS. By W. N. Page. *E. & M. J.*, vol. 86, p. 1107. 3½ columns.

CAUSES OF COAL-DUST EXPLOSIONS. *E. & M. J.*, vol. 85, p. 1188. ¼ column.

See also **CAUSE OF ACCIDENTS.**

COAL DUST WILL EXPLODE WITHOUT THE PRESENCE OF GAS. *E. & M. J.*, vol. 88, p. 1227. 1½ columns.

CHEMISTRY OF A COAL-DUST EXPLOSION. By Donald W. D. Stuart. *Colliery Guardian*, Mar. 18, 1898. p. 494.

CHEMISTRY OF COAL-DUST EXPLOSIONS. *M. & M.*, vol. 31, p. 264. 5 columns.

BRITISH COAL-DUST EXPERIMENTS. *M. & M.*, vol. 29, p. 285. 10½ columns. I.

NEW EXPERIMENTS ON COAL-DUST EXPLOSIONS AT LIEVIN. By E. Walch. *E. & M. J.*, vol. 89, p. 381. 1½ columns.

- COAL-DUST EXPERIMENTS. E. & M. J., vol. 88, p. 878. 1½ columns.
- SOME RESULTS OF EXPERIMENTS MADE TO TEST THE EFFECT OF SPRAYERS UPON THE MOISTURE OF MAIN ROADS AT BRANDON COLLIERY. By T. L. Elwen. T. I. M. E., vol. 38, p. 311, 9 pages. I.
- SOME FRENCH EXPERIMENTS ON COAL DUST. By H. Briggs. E. & M. J., vol. 90, p. 1266. 14½ columns.
- COAL-DUST EXPERIMENTS. E. & M. J., vol. 86, p. 817. 1 column.
- FRENCH COAL-DUST EXPERIMENTS. By J. Taffanel. Colliery Guardian, Aug. 13, 1909.
- EXPERIMENTS ON COAL-DUST DEPOSITS. By L. Morin. Colliery Guardian, Apr. 28, 1911.
- DUST IN MINES. Colliery Engineer, vol. 10, p. 20.
- AMOUNT OF COAL DUST IN AIRWAYS. M. & M., vol. 29, p. 223. 1 column.
- NEW AND OLD COAL DUST. M. & M., vol. 29, p. 127. 2½ columns.
- COAL-MINE DUST. E. & M. J., vol. 86, p. 89. 1 column. I.
- COAL DUST IN MINES. J. M. Soc. N. S., vol. 13, p. 66. 1½ pages.
- SUPPRESSING COAL DUST. Iron & Coal Trades Rev., Nov. 26, 1909.
- METHOD OF DEALING WITH COAL DUST IN WESTPHALIA. Colliery Guardian, June 11, 1909, p. 1170; June 18, 1909, p. 1219.
- PREVENTING DUST FORMATION. By Herr Meissner. Glückauf, July 8, 1911.
- REDUCTION, CONTROL AND COLLECTION OF COAL DUST IN MINES. By S. Mavor. Colliery Guardian, Sept. 15, 1911.
- INVESTIGATIONS ON THE DRYING OF COAL MINES AND THE CONTROL OF MINE DUST. By Herr Forstmann, Glückauf, Jan. 15, 1911.
- EXTRACTING DUST FROM COAL MINES. Colliery Guardian, May 26, 1911.
- VENTILATING APPLIANCES AND DUST EXTRACTIONS IN COTTON MILLS. Engineering, Feb. 10, 1911.
- DUST REMOVAL IN COAL MINES. Electrical Review, May 26, 1911.
- DUST REMOVAL DEVICES IN RHINE LIGNITE DISTRICT. By Baldus. Glückauf, Dec. 5, 1908.
- DUST COLLECTION IN ANTHRACITE BREAKERS. M. & M., vol. 29, p. 222. 1 column. I.
- DEALING WITH COAL DUST. By P. A. Grady. M. & M., vol. 30, p. 336. 2 columns.
- PREVENTION OF COAL DUST. P. C. M. & M. Soc. S. A., vol. 9, p. 173. ½ column.
- COAL DUST AS A FACTOR IN MINE EXPLOSIONS. P. C. M. & M. Soc. S. A., vol. 9, p. 174. 1½ columns.
- CONDITIONS OF FORMATION OF DUST. By M. J. Taffanel. Colliery Guardian, Jan. 20, 1911.
- EXPERIMENTS ON LIQUID MIXTURES FOR LAYING COAL DUST. By W. M. Thornton. Iron & Coal Trades, Review, Aug. 11, 1911.
- EXPERIMENTS ON LIQUID MIXTURES FOR LAYING COAL DUST. By W. M. Thornton, Mining Engineering, Sept., 1911.
- COAL-DUST PROBLEM. By John Verner. Coal Trade Bull., May 15, 1909.
- COAL DUST. By W. E. Garforth. Colliery Guardian, May 26, 1911.
- COAL-DUST QUESTION IN AMERICA. Colliery Guardian, Dec. 10, 1910.
- PRESENT POSITION OF THE COAL-DUST PROBLEM. By J. S. J. Ashworth. Canadian Min. Jour., Nov. 1, 1908.
- THE COAL-DUST QUESTION IN GREAT BRITAIN. By H. Hall. E. & M. J., vol. 87, p. 1084. 17 columns. I.
- THE COAL-DUST PROBLEM. By J. Verner. M. & M., vol. 29, p. 466. 6½ columns. I.

- AN ANALYSIS OF THE COAL-DUST PROBLEM. By A. H. Stow. E. & M. J., vol. 89, p. 1284. 11½ columns.
- THE DUST PROBLEM IN COAL MINES. By J. Virgin. E. & M. J., vol. 88, p. 734. 1½ columns.
- INFLUENCE OF COAL DUST IN MINES. By Henry Kinlock. Colliery Guardian, vol. 9, p. 568.
- DANGERS OF COAL DUST. E. & M. J., vol. 90, p. 178. 2 columns.
- LESSONS FROM COAL-DUST EXPLOSIONS. E. & M. J., vol. 89, p. 1170. 3½ columns. I.
- EXPLOSIBILITY OF COAL DUST. M. & M., vol. 31, p. 369. 1 column.
- THE EXPLOSIBILITY OF COAL DUST. By G. S. Rice. U. S. G. S., Bull. 425, 186 pages. I+.
- EXPLOSIBILITY OF COAL DUST. E. & M. J., vol. 90, p. 616. 2½ columns.
- EXPLOSIBILITY OF COAL DUST. Engineer, Dec. 9, 1910.
- DUST AS AN EXPLOSIVE; from Amer. Exchange Review. Sci. Am. Sup. No. 125, Mar. 25, 1878.
- IS COAL DUST, AS SUCH, EXPLOSIVE? By A. H. Stow. E. & M. J., vol. 87, p. 17. 9 columns.
- IS DUST, AS SUCH, EXPLOSIVE? By F. Haas. M. & M., vol. 29, p. 227. 4½ columns.
- COMPARATIVE INVESTIGATION OF THE INFLAMMABILITY OF COMBUSTIBLE COAL DUSTS. By M. J. Taffanel. Revue de Metal., May, 1911.
- INFLAMMABILITY OF MIXTURES OF COAL DUST AND AIR. By P. P. Bedson. Iron & Trades Review, June 3, 1910.
- INFLAMMABILITY OF SHALE DUST. E. & M. J., vol. 89, p. 786. 1 column.
- EXPERIMENTS ILLUSTRATIVE OF THE INFLAMMABILITY OF MIXTURES OF COAL DUST AND AIR. By P. P. Bedson. T. I. M. E., vol. 39, p. 719. 9 pages. I.
- EXPLOSIVE EFFECT OF ELECTRIC CURRENTS ON COAL DUST. E. & M. J., vol. 85, p. 722. 1½ columns.
- EXPLOSIVE EFFECT OF ELECTRIC CURRENTS ON COAL DUST. E. & M. J., vol. 85, p. 1110. 1½ columns.
- See also CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.
- THE PROBLEM OF TREATING DUST IN COAL MINES. By F. Haas. E. & M. J., vol. 86, p. 814. 9 columns.
- DUST AND DUST-LAYING. P. C. M. & M. Soc. S. A., vol. 7, p. 163. 3 columns.
- PULVERIZED SHALE FOR PREVENTION OF COAL DUST EXPLOSIONS. E. & M. J., vol. 87, p. 11. ¼ column.
- CALCIUM-CHLORIDE TREATMENT FOR DUST. M. & M., vol. 29, p. 216. 2 columns.
- COAL DUST AND ITS TREATMENT WITH CALCIUM CHLORIDE. E. & M. J., vol. 89, p. 1125. ¼ column.
- USE OF CALCIUM CHLORIDE IN MINES TO MAINTAIN DAMP CONDITIONS AND LAY DUST. M. & M., vol. 30, p. 336. ½ column.
- COAL DUST AND CALCIUM CHLORIDE. E. & M. J., vol. 90, p. 589. ¼ column.
- COAL DUST TO DATE, AND ITS TREATMENT WITH CALCIUM CHLORIDE. By Henry Hall. T. I. M. E., vol. 36, p. 500. 36 pages. I.
- COAL DUST AND ITS TREATMENT WITH CALCIUM CHLORIDE. T. I. M. E., vol. 37, p. 553. 7 pages.
- SPRAYING COAL DUST AS A COLLIERY SAFEGUARD. By D. Harrington. E. & M. J., vol. 87, p. 194. 9½ columns. I.
- SPRAYING COAL MINES. By D. Harrington. M. & M., vol. 29, p. 102. 4½ columns. I.
- EXPERIMENTS WITH SPRAYERS IN COAL MINES. E. & M. J., vol. 89, p. 831. 1½ columns.
- THE EFFICIENCY OF SPRINKLING: Prevention of Coal Dust Explosions. E. & M. J., vol. 88, p. 78. ¼ column.
- MINE SPRAYS AT THE BANNER MINE, ALABAMA. E. & M. J., vol. 90, p. 327. 2½ columns.

- EFFECT OF DAMPNES FROM SPRAYING MINES OR MINERS.** E. & M. J., vol. 90, p. 328. $\frac{1}{2}$ column.
- COAL DUST SPRINKLING.** E. & M. J., vol. 85, p. 1009. 1 column. I.
- COAL-DUST EXPLOSIONS.** By J. Verner. M. & M., vol. 31, p. 623. $11\frac{1}{2}$ columns.
- DUST EXPLOSIONS IN COAL MINES.** By G. S. Rice. T. A. I. M. E., vol. 41, p. 236. 5 pages.
- STONE DUST ZONES: Relating to Coal Dust Explosions.** M. & M., vol. 31, p. 666. 1 column.
- DUST EXPLOSION AT MINNEAPOLIS, MAY 2, 1878, AND OTHER DUST EXPLOSIONS.** By S. F. Peckham. M. & M., vol. 29, p. 55. $6\frac{1}{2}$ columns. I.
- COAL-DUST EXPLOSIONS.** M. & M., vol. 29, p. 103. 1 column.
- REPORT OF THE FRENCH COMMISSION ON EXPLOSIVES AND COAL DUST.** M. & M., vol. 29, p. 106. 2 columns.
- COAL DUST AND MINE EXPLOSIONS.** E. & M. J., vol. 88, p. 410. 2 columns.
- DUST EXPLOSIONS IN COAL MINES.** By F. Bache. M. & M., vol. 30, p. 347. 3 columns.
- COAL DUST EXPLOSIONS.** Min. Mag. London, vol. 2, p. 150. $\frac{1}{2}$ column.
- GAS AND DUST IN MINE EXPLOSIONS.** E. & M. J., vol. 85, p. 554. 1 column.
- EXPERIMENTS IN COAL DUST.** By W. E. Garforth. Nature, Oct. 20, 1908.
- COAL DUST EXPERIMENTS.** By William Galloway. Sci. Am. Sup., Mar. 23, 1882.
- RECENT COAL DUST EXPERIMENTS.** By Henry Hall. Colliery Guardian, Jan. 20, 1911.
- COAL DUST EXPERIMENTS.** By Dr. Czaplinski. Iron & Coal Trades Review, Sept. 10, 1909.
- BRITISH COAL DUST EXPERIMENTS.** Iron & Trades Review, Oct. 1, 1909.
- BRITISH COAL DUST EXPERIMENTS.** Colliery Guardian, July 30, 1909.
- REPORT OF THE FRENCH COMMISSION ON EXPLOSIVES AND COAL DUST.** M. & M., vol. 29, p. 106. 2 columns.
- NOTES ON RECENT DEMONSTRATIONS OF COAL-DUST PHENOMENA.** By James Ashworth. T. I. M. E., vol. 36, p. 366. 12 pages.
- RECENT DEMONSTRATIONS OF COAL-DUST PHENOMENA.** T. I. M. E., vol. 37, p. 234. 19 pages.
- THE BAROMETRIC AND TEMPERATURE CONDITIONS AT THE TIME OF DUST-EXPLOSIONS IN THE APPALACHIAN COAL-MINES.** By N. H. Mannakee. T. A. I. M. E., vol. 40, p. 655. 12 pages.
- RECENT DUST PREVENTION EXPERIMENTS.** By Hert Quiring. Glückauf, July 15, 1911.
- SHALE-DUST AND COAL-DUST TESTS AT BROXBURN.** By R. McLaren and W. Clark. T. I. M. E., vol. 38, p. 362. $13\frac{1}{2}$ pages. I.
- METHODS OF HEATING BITUMINOUS COAL DUST.** By Hert Schwidtal. Glückauf, Aug. 5, 1911.
- MICROSCOPIC EXAMINATION OF COAL DUST.** By James Lomax. Iron & Coal Trades Rev., Apr. 21, 1911.
- SOME MEMORANDA CONCERNING COAL-DUST AND THE ESSENTIAL PRINCIPLES OF THE COAL-DUST THEORY.** By H. W. G. Halbaum. T. I. M. E., vol. 39, p. 728. 34 pages.
- COMPARATIVE STUDY OF COMBUSTIBLE DUSTS.** Colliery Guardian, June 21, 1911.
- ESSENTIAL PRINCIPLES OF THE COAL DUST THEORY.** By H. W. G. Halbaum. Colliery Guardian, June 3, 1910. p. 1065. 4 columns.
- HISTORY OF THE COAL DUST THEORY.** By W. Walker. Colliery Guardian, vol. 12, p. 268.
- DANGEROUS PROPERTIES OF DUST.** By Prof. A. T. Abel. Sci. Am. Sup. No. 374, Mar. 3, 1883; No. 375, Mar. 10, 1883.

- DISTILLATION OF VOLATILE HYDROCARBONS DURING AN EXPLOSION OF COAL DUST.** E. & M. J., vol. 87, p. 18. $\frac{1}{2}$ column.
- ELECTRICITY AND COAL DUST.** E. & M. J., vol. 89, p. 1238. 1 column.
- IGNITION OF COAL DUST BY ELECTRIC FLASHES.** By W. M. Thornton and E. Bowden. Iron & Coal Trades Rev., Apr. 15, 1910.
- IGNITION FROM INCANDESCENT FILAMENTS OF ELECTRIC LAMPS.** By E. Lemaire. Iron & Coal Trades Rev., Sept. 8, 1911.
- IGNITION OF COAL DUST BY SINGLE ELECTRIC FLASHES.** E. & M. J., vol. 89, p. 1169. 2 columns.
- SOME EXPERIMENTS TO ILLUSTRATE THE IGNITION OF COAL DUST BY MEANS OF ELECTRICITY.** By J. Cadman. T. I. M. E., vol. 39, p. 93. 4 pages.
- THE IGNITION OF COAL DUST BY SINGLE ELECTRIC FLASHES.** By W. M. Thornton. T. I. M. E., vol. 39, p. 201. 24 pages. I.
- THE IGNITION OF COAL DUST BY A NAKED LIGHT.** By J. Cadman. T. I. M. E., vol. 38, p. 256. 3 pages.
- See also **MINE ATMOSPHERE AND GASES.**
- Chambers of Refuge**
- REFUGE CHAMBERS IN COAL MINES.** By G. S. Rice. E. & M. J., vol. 90, p. 419. 11 columns. I.
- SAFETY CHAMBERS IN COAL MINES.** E. & M. J., vol. 90, p. 32. $1\frac{1}{2}$ columns.
- REFUGE CHAMBERS IN MINES.** Min. & Sci. Press., vol. 100, p. 890. $2\frac{1}{2}$ columns. I.
- COLLIERY RESCUE CHAMBERS.** P. C. M. & M. Soc. S. A., vol. 9, p. 281. Note.
- Mine Fires**
- ORIGIN OF MINE FIRES.** E. & M. J., vol. 89, p. 159. 1 column.
- See also **CAUSE OF ACCIDENTS.**
- FIRE AND FIRE RISKS.** P. C. M. & M. Soc. S. A., vol. 7, p. 87. 1 column.
- RECOLLECTIONS OF MINE FIRES.** By W. Crosley. Min. Mag., London, vol. 3, p. 129. 6 columns. I.
- MINE FIRES.** E. & M. J., vol. 85, p. 1158. 1 column.
- MINE FIRES.** E. & M. J., vol. 87, p. 300. $\frac{1}{2}$ column.
- MINE FIRES.** By T. K. Adams. M. & M., vol. 31, p. 274. $3\frac{1}{2}$ columns.
- THE IDAHO MINE FIRE.** Min. & Sci. Press, vol. 100, p. 717. $\frac{1}{2}$ column.
- FIRE AT THE HOMESTAKE MINE.** Min. & Sci. Press, vol. 96, p. 809. 2 columns.
- FIRE IN LONDON MINE OF TENNESSEE COPPER COMPANY.** By N. H. Emmons. E. & M. J., vol. 88, p. 1181. 3 columns. I.
- COCKERILL MINE FIRE.** M. & M., vol. 30, p. 569. $\frac{1}{2}$ column.
- NOTES ON THE CHERRY MINE DISASTER.** By G. S. Rice. J. W. Soc. E., vol. 14, p. 797. 25 pages. I.
- THE CHERRY MINE DISASTER.** M. & M., vol. 30, p. 423. $10\frac{1}{2}$ columns.
- THE CHERRY MINE DISASTER.** M. & M., vol. 30, p. 296. $3\frac{1}{2}$ columns.
- THE CHERRY MINE DISASTER AND ITS LESSONS.** By S. Reynolds. E. & M. J., vol. 89, p. 525. $3\frac{1}{2}$ columns.
- A CHERRY MINER'S LAST MESSAGE.** By F. W. Parsons. E. & M. J., vol. 88, p. 1173. $1\frac{1}{2}$ columns.
- THE STORY OF THE ST. PAUL MINE FIRE.** By F. W. Parsons. E. & M. J., vol. 88, p. 1119. $17\frac{1}{2}$ columns. I.
- ANOTHER VIEW OF THE ST. PAUL MINE DISASTER.** By L. F. Wilson. E. & M. J., vol. 88, p. 1175. $2\frac{1}{2}$ columns.
- MINE FIRES IN THE LIGNITE MINES OF ITALY.** E. & M. J., vol. 89, p. 1180. $1\frac{1}{2}$ columns.
- THE PRICE-PANCOAST DISASTER.** M. & M., vol. 31, p. 616. 6 pages. Map.

- A SHAFT FIRE IN THE SHATTUCK MINE, BISBEE, ARIZONA.** By J. Stauber. E. & M. J., vol. 85, p. 197. 2 columns.
- AN UNDERGROUND FIRE DISASTER.** By J. Ashworth. E. & M. J., vol. 86, p. 1060. 6½ columns. I.
- UNDERGROUND FIRES IN FIERY MINES.** By W. T. Heslop. T. I. M. E., vol. 38, p. 338. 16 pages. I.
- UNDERGROUND FIRES IN GASSY MINES.** E. & M. J., vol. 89, p. 882. 1½ columns.
- UNDERGROUND FIRES IN MINES.** By A. Aron. T. I. M. E., vol. 37, p. 700. 1 page.
- See also CAUSE OF ACCIDENTS.
- ANTHRACITE BREAKER FIRES.** E. & M. J., vol. 89, p. 1172. 2 columns.
- FIGHTING A MINE FIRE, NOVA SCOTIA.** By F. W. Gray. M. & M., vol. 29, p. 210. 2½ columns. I.
- FIGHTING FIRE IN AN ANTHRACITE COAL MINE.** By P. H. Devers. E. & M. J., vol. 86, p. 86. 9½ columns.
- FIGHTING AN UNDERGROUND FIRE WITH OXYGEN BREATHING APPARATUS.** By F. W. Gray. E. & M. J., vol. 86, p. 858. 2½ columns.
- FIGHTING THE FIRE AT THE HOMESTAKE MINE.** By B. C. Yates. E. & M. J., vol. 85, p. 633. 23½ columns. I.
- PUTTING OUT THE HOMESTAKE MINE FIRE BY FLOODING.** E. & M. J., vol. 85, p. 636. 2½ columns.
- FOAM AS A FIRE EXTINGUISHER.** M. & M., vol. 30, p. 4. 1 column.
- FIGHTING A COAL-MINE FIRE.** By F. Lynde. E. & M. J., vol. 88, p. 565. ½ column.
- SUCCESSFULLY QUENCHING A MINE FIRE.** M. & M., vol. 30, p. 340. 2½ columns. I.
- DEALING WITH MINE FIRES.** M. & M., vol. 31, p. 275. ½ column.
- METHODS OF DEALING WITH GOB-FIRES IN THE MAIN COAL SEAM AT NETHERSEAL COLLIERY.** By F. N. Siddall. T. I. M. E., vol. 36, p. 454. 19 pages. I.
- EXTINGUISHING THE FIRE IN THE TESTASECCA MINE, SICILY.** By F. C. Chrambach. T. I. M. & M., vol. 18, p. 153. 4 pages. I.
- THE REDUCTION OF FIRES IN MINES.** By A. G. Morse. E. & M. J., vol. 88, p. 166. 1½ columns.
- SULPHUR DIOXIDE AS AN AGENT IN FIGHTING MINE FIRES.** By W. O. Snelling. T. A. I. M. E., vol. 39, p. 550. 3 pages.
- USE OF STEAM IN EXTINGUISHING FIRE AT HOMESTAKE MINE.** E. & M. J., vol. 85, p. 635. 2 columns.
- SEALING OFF SUMMIT HILL MINE FIRE.** By H. H. Stoek. M. & M., vol. 30, p. 1. 8½ columns. I.
- SEALING OFF A FIRE.** M. & M., vol. 29, p. 367. ½ column.
- TEMPORARY FIRE WALLS FOR COAL MINES.** E. & M. J., vol. 87, p. 650. ½ column.
- See also UNDERGROUND DAMS.
- DANGER OF USING CULM FOR FILLS ABOUT FOUNDATIONS: FIRES.** By F. W. Brady. M. & M., vol. 29, p. 58. 1 column. I.
- See also PACKING MINE WORKINGS.
- MINE FIRE AT BUTTE.** M. & M., Apr., 1901, p. 423.
- See also DESCRIPTION OF DAMS AND THEIR CONSTRUCTION.
- See also STOPPINGS, DOORS AND REGULATORS.
- See also UNDERGROUND DAMS.
- See also MINE ATMOSPHERE AND GASES.

Mine Regulations

- RULES FOR THE GUIDANCE OF EMPLOYEES UNDERGROUND.** By R. C. Turner. Min. & Sci. Press, vol. 95, p. 493. 2 columns.
- MINING SAFETY LAWS.** E. & M. J., vol. 87, p. 175. 6 columns.

REGULATIONS GOVERNING THE COAL MINES OF THE ACADIA COAL COMPANY, NOVA SCOTIA. J. M. Soc. N. S., vol. 13, p. 58. 2 pages.

GENERAL MINE RULES OF THE STAG CAÑON FUEL CO., New Mexico. T. A. I. M. E., vol. 40, p. 358. 2½ pages.

RULES AND REGULATIONS OF THE STAG CAÑON FUEL COMPANY, NEW MEXICO. M. & M., vol. 31, p. 654. 2 columns.

RULES OF THE H. C. FRICK COKE COMPANY. M. & M., vol. 29, p. 15. 2 columns.

ALABAMA INSPECTOR'S WARNING CARD. M. & M., vol. 31, p. 763. 1 column.

CHANGES IN MINE REGULATIONS DURING 1908-1909. E. & M. J., vol. 89, p. 1228. 4 columns.

See also DISCIPLINE IN MINES.

See also USE OF EXPLOSIVES IN COAL MINING.

See also INSPECTION OF MINES.

Spontaneous Combustion in and about Mines

SPONTANEOUS COMBUSTION OF COAL. By E. Stansfield. J. C. M. I., vol. 13, p. 196. 33 pages. D.

SPONTANEOUS COMBUSTION. By T. Seabridge. T. I. M. E., vol. 36, p. 109. 8 pages. I.

SPONTANEOUS COMBUSTION OF COAL. By S. W. Parr and F. W. Kressman. Univ. of Ill. Bull. 46, Dec. 19, 1911.

SPONTANEOUS COMBUSTION IN COAL MINES. By W. H. Shore. Colliery Engineer, vol. 11, page 162.

SPONTANEOUS IGNITION OF COAL IN ENGLAND: Dysart-Main Seam. T. I. M. E., vol. 36, p. 568. Note.

SPONTANEOUS IGNITION OF COAL AND ITS PREVENTION. By V. B. Lewes. Colliery Engineer, vol. 12, p. 219.

SPONTANEOUS IGNITION OF COAL. By R. O. Doane, Engineering News, Aug. 18, 1904; Mining Mag., Sept., 1904.

SPONTANEOUS IGNITION OF COAL. P. C. M. & M. Soc. S. A., vol. 7, p. 226. ¾ column.

See also DECOMPOSITION OF COAL.

Mine Explosions

EXPLOSIBILITY OF NATURAL GAS. P. E. Soc. W. Pa., vol. 2, p. 343. 2 pages.

See also MINE ATMOSPHERE AND GASES.

COLLIERY EXPLOSIONS AND THEIR CAUSES. By Percy W. Taylor. Cassier's Magazine, July, 1911.

EXPLOSIONS IN COAL MINES. By W. Seddon. Colliery Engineer, vol. 9, p. 151.

EXPLOSIONS IN COAL MINES. By R. P. W. Oswald. Colliery Engineer, vol. 9, p. 232.

REVIEW OF COLLIERY EXPLOSIONS. By G. H. Winstanley. Iron & Trades Review, Mar. 17, 1911.

COLLIERY EXPLOSIONS AND COAL DUST. Colliery Guardian, vol. 16, p. 204.

COLLIERY EXPLOSIONS. Colliery Engineer, vol. 11, pp. 176, 259, 268.

EXPLOSIONS IN COAL MINES. E. & M. J., vol. 89, p. 928. 2½ columns.

EXPLOSIONS IN THE UNITED STATES DURING THE LAST THREE YEARS. By C. E. Munroe. Min. & Sci. Press, vol. 99, p. 681. 8¾ columns.

EXPLOSIONS IN BITUMINOUS COAL MINES. By G. P. Bartholomew. E. & M. J., vol. 85, p. 368. 1½ columns.

RECENT EXPLOSIONS IN COAL MINES. By H. M. Chance. E. & M. J., vol. 85, p. 553. 7½ columns.

RECENT MINE EXPLOSIONS. E. & M. J., vol. 85, p. 1111. 1 column.

MINE EXPLOSIONS. P. C. M. & M. Soc. S. A., vol. 9, p. 246. 2 columns.

COLLIERY EXPLOSIONS IN PRUSSIA DURING 1907. T. I. M. E., vol. 37, p. 698. 2½ pages.

- EXPLOSIONS IN MINES AND COLLIERIES, AND METHODS OF VENTILATION. *Min. Mag.*, vol. 1, p. 97. 10 pages. I.
- REMARKS ON SOME RECENT EXPLOSIONS IN COAL MINES. By C. J. Coll. *J. M. Soc. N. S.*, vol. 13, p. 51. 16½ pages.
- VIEWS RESPECTING COAL-MINE EXPLOSIONS: A Symposium. *E. & M. J.*, vol. 87, p. 12. 14½ columns.
- REFLECTIONS ON SOME COLLIERY EXPLOSIONS. *E. & M. J.*, vol. 90, p. 466. 6 columns.
- EXPLOSIONS IN MINES: Experimental Station. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 280. 1½ columns.
- THE MARIANNA EXPLOSION. *M. & M.*, vol. 29, p. 272. 13½ columns. I.
- FACTS CONCERNING THE MARIANNA EXPLOSION. By F. W. Parsons. *E. & M. J.*, vol. 86, p. 1162. 9 columns. I.
- THE LICK BRANCH EXPLOSION. *E. & M. J.*, vol. 87, p. 171. ¾ column.
- LICK BRANCH DISASTER: Explosion. By H. H. Stoeck. *M. & M.*, vol. 29, p. 360. 11½ columns. I.
- MINE EXPLOSION AT STEARNS, KENTUCKY. By H. M. Payne. *E. & M. J.*, vol. 89, p. 474. 5½ columns. I.
- MINE EXPLOSION AT STEARNS, KENTUCKY. *M. & M.*, vol. 30, p. 572. 4 columns. I.
- THE MULGA MINE EXPLOSION. *M. & M.*, vol. 31, p. 40. 4 columns. I and map of workings.
- THE MULGA MINE EXPLOSION. *E. & M. J.*, vol. 89, p. 978. 1½ columns.
- EXPLOSION AT PALAN No. 2 MINE. *M. & M.*, vol. 31, p. 202. 3¼ columns. I.
- EXPLOSION AT PALAN MINE, MEXICO. *M. & M.*, vol. 30, p. 462. 2 columns. I.
- THE DELAGUA, COLORADO, EXPLOSION. By G. F. Duck. *M. & M.*, vol. 31, p. 374. 13½ columns. I.
- NOTES ON THE DELAGUA, COLORADO, EXPLOSION. *M. & M.*, vol. 31, 641. 4 columns. I.
- THE STARKVILLE, COLORADO, EXPLOSION. *M. & M.*, vol. 31, p. 261. 4 columns. I.
- THE MORAL OF STARKVILLE. By S. Reynolds. *M. & M.*, vol. 31, p. 391. 3½ columns.
- THE PRIMERO DISASTER. By R. L. Herrick. *M. & M.*, vol. 30, p. 463. 16 columns. I.
- NANTICOKE DISASTER. *Colliery Engineer*, vol. 12, p. 111.
- SOUTH WILKES-BARRE MINE EXPLOSION. *M. & M.*, vol. 30, p. 556. 1 column.
- WEHRUM MINE EXPLOSION. *M. & M.*, vol. 30, p. 118. 4½ columns.
- REPORT ON THE MONONGAH MINE EXPLOSION. By George Harrison. *E. & M. J.*, vol. 85, p. 264. 4 columns.
- THE BELLEVUE EXPLOSION, ALBERTA. By J. Ashworth. *M. & M.*, vol. 31, p. 399. 4 columns. I.
- THE PALOS MINE DISASTER. *M. & M.*, vol. 30, p. 736. 2½ columns. I.
- BANNER MINE EXPLOSION. *M. & M.*, vol. 31, p. 675. 2 columns.
- NOTES ON THE NORTON HILL COLLIERY EXPLOSION. By H. M. Morgan. *E. & M. J.*, vol. 87, p. 994. 5 columns.
- A NATAL COLLIERY EXPLOSION, AND UNDERGROUND FIRES IN FIERY MINES. By W. T. Heslop. *T. I. M. E.*, vol. 38, p. 338. 16 pages. I.
- See also MINE FIRES.
- MAYPOLE AND HULTON DISASTERS: Mine Explosions. *M. & M.*, vol. 31, p. 667. ¼ column.
- THE COKEDALE, COLORADO, EXPLOSION. By G. F. Duck. *M. & M.*, vol. 31, p. 658. 9½ columns. Map.
- MINE GASES AND COLLIERY EXPLOSIONS. By H. B. Winstanley. *Iron & Coal Trades Review*, Oct. 8, 1909.
- GAS EXPLOSIONS IN BELGIUM. By Herr Bracht. *Glückauf*, Apr. 2, 1910.

- PHENOMENA PRECEDING GAS EXPLOSIONS.** By Francis Laur. E. & M. J., Sept. 11, 1909.
- CATALYTIC ACTIONS AND EXPLOSIONS OF GAS.** By Hans Fleissner. The Vest Zeilscher. f. Berg u. Huttenwesen, Apr. 9, 1910.
- EXPLOSION IN WHICH COAL DUST WAS AN IMPORTANT ELEMENT.** Colliery Engineer, vol. 9, p. 201.
- See also **COAL DUST AS AN EXPLOSIVE AGENT.**
- LIST OF FATAL AND NON-FATAL EXPLOSIONS OF FIRE-DAMP OR COAL DUST, AND BAROMETER, THERMOMETER, Etc., Readings for the years 1907 and 1908.** By P. Stezelecki. T. I. M. E., vol. 36, p. 777. 2 pages. Tables.
- See also **MINE GASES AND BAROMETRIC PRESSURE.**
- ATMOSPHERIC PRESSURE AND MINE EXPLOSIONS.** By W. Hartman. E. & M. J., vol. 89, p. 1164. 1½ columns. D.
- THE CAUSE OF COAL-MINE EXPLOSIONS.** By William Griffiths. E. & M. J., vol. 85, p. 301. 1½ columns.
- MINE EXPLOSIONS AND THEIR CAUSES.** By J. Taylor. E. & M. J., vol. 87, p. 1191. 1½ columns.
- REPORT ON CAUSE OF EXPLOSION AT THE SHORT CREEK MINE.** E. & M. J., vol. 87, p. 896. ¼ column.
- See also **CAUSE OF ACCIDENTS.**
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES.** By W. A. Spalding. E. & M. J., vol. 88, p. 562. 5½ columns.
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES.** By W. A. Spalding. E. & M. J., vol. 87, p. 899. 1 column.
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES.** By W. A. Spalding. E. & M. J., vol. 87, p. 411. 9 columns.
- SEISMIC DISTURBANCES AND COAL-MINE EXPLOSIONS.** By A. H. Stow. E. & M. J., vol. 88, p. 449. 5½ columns.
- EXTENSION EXPLOSION.** By E. Jacobs. Canadian Min. Jour., Jan. 1, 1910.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS:** Discussion of Paper of C. Scholz, T. A. I. M. E., vol. 39, p. 324. vol. 40, p. 835. 14 pages.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS.** By C. Scholz. T. A. I. M. E., vol. 39, p. 328. 8 pages.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS.** By C. Scholz. M. & M., vol. 29, p. 156. 6½ columns. I.
- See also **MINE ATMOSPHERE AND GASES.**
- THE PHENOMENA PRECEDING GAS EXPLOSIONS.** By F. Laur. E. & M. J., vol. 88, p. 500. 8 columns.
- PREVENTION OF MINE EXPLOSIONS.** P. C. M. & M. Soc. S. A., vol. 9, p. 282. 3½ columns.
- THE PREVENTION OF COAL-MINE EXPLOSIONS.** By W. B. Williams. E. & M. J., vol. 85, p. 816. 3 columns.
- EQUIPMENT FOR THE PREVENTION OF MINE EXPLOSION.** By W. S. Mayers. E. & M. J., vol. 85, p. 409. 4½ columns.
- THE PREVENTION OF MINE EXPLOSIONS.** E. & M. J., vol. 86, p. 860. 6½ columns.
- PREVENTION OF MINE EXPLOSIONS, REPORT AND RECOMMENDATIONS.** By V. Watteym, C. Meisener, and R. Desborough. U. S. G. S., Bull. 369, 11 pages, 1908.
- PREVENTION OF MINE EXPLOSIONS.** M. & M., vol. 29, p. 193. 3½ columns.
- PREVENTING MINE EXPLOSIONS.** By G. H. Ashley. M. & M., vol. 29, p. 16. 4 columns.
- PREVENTION OF MINE EXPLOSIONS.** By J. Ashworth. M. & M., vol. 29, p. 325. 2½ columns. I.

THE CONTROL OF COAL MINE EXPLOSIONS. By H. J. Nelms. E. & M. J., vol. 87, p. 14. 2½ columns.

See also **PROTECTION IN MINING.**

THE VALUE OF ZONES IN STOPPING FLAME. By J. Virgin. E. & M. J., vol. 88, p. 1173. 1½ columns.

ISOLATION OF CERTAIN AREAS FROM CONTACT WITH AFTER-GASES BY AN EXPLOSION. By N. Robinson. M. & M., vol. 29, p. 372. 1½ columns. I.

See also **MINE ATMOSPHERE AND GASES.**

A WARNING TO COAL MEN: Relating to Mine Explosions. By E. Haworth. M. & M., vol. 31, p. 672. 3 columns.

SEALING SHAFTS AFTER EXPLOSION. By J. A. Garcia. M. & M., vol. 30, p. 59. 6½ columns. I.

ROYAL COMMISSION REPORT. Colliery Guardian, vol. 63, 1892.

Poisoning and Injuries

LEAD POISONING AND SUBLIMED WHITE LEAD. By J. I. Blair. E. & M. J., vol. 90, p. 1061. 2½ columns.

PHOSPHOROUS POISONING. M. & M., vol. 31, p. 693. 1 column.

HYDROCYANIC ACID POISONING. E. & M. J., vol. 86, p. 407. ¼ column.

DANGERS OF WHITE ARSENIC. P. C. M. & M. Soc. S. A., vol. 9, p. 314. ½ column.

ANTIDOTE FOR ARSENIC POISONING. M. & M., vol. 29, p. 508. Note.

GASEOUS POISONING. P. C. M. & M. Soc. S. A., vol. 5, p. 192. 4 columns.

THE HÆMATOLOGY OF CARBON-MON-OXIDE POISONING. P. C. M. & M. Soc. S. A., vol. 7, p. 386. 3½ columns.

NOTES ON THE PERSISTENCE OF CYANIDE IN THE STOMACH AFTER DEATH. By W. H. Jollyman. P. C. M. & M. Soc. S. A., vol. 5, p. 170. 3½ columns.

CHLOROFORM AS AN ANTIDOTE AGAINST NITROUS VAPOURS. By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 63. ½ column.

TREATMENT OF BURNS. P. C. M. & M. Soc. S. A., vol. 5, p. 67. ¼ column.

Powder Explosions

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EXPLOSION AT THE ALASKA-MEXICAN MINE. By R. A. Kinzie. E. & M. J., vol. 89, p. 603. 2 columns. I.

EXPLOSION AT MEXICAN MINE, ALASKA. By R. A. Kinzie. Min. & Sci. Press, vol. 100, p. 423. 1½ columns. I.

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EXPLOSION HEARD AFAR. Min. & Sci. Press, vol. 96, p. 419. Note.

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LANDSLIDES IN THE SAN JUAN MOUNTAINS, COLORADO, INCLUDING A CONSIDERATION OF THEIR CAUSES AND THEIR CLASSIFICATION. By L. C. Graton and C. H. Gordon. U. S. G. S., Professional Paper 67, 58 pages. I. 1909.

LANDSLIDE OR "ROCK-STREAM" AT HEAD OF AMERICAN BASIN, COLORADO. Min. & Sci. Press, vol. 101, p. 698. ½ column. I.

THUNDER-MOUNTAIN LANDSLIDE. By K. Baumgarten. Min. & Sci. Press, vol. 101, p. 698. 3 columns. I.

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- THE CARE OF MINE MULES. M. & M., vol. 31, p. 650. 5½ columns. I.
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- MINE STABLES FOR MULES. M. & M., vol. 31, p. 650. 5½ columns. I.
- CONCRETE UNDERGROUND MINE STABLES. By J. H. Haertter. Coal Mining Supplement, E. & M. J., vol. 88, p. 31. 10½ columns. I.

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- THE THEORY OF BLASTING WITH HIGH EXPLOSIVES. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 9, p. 111. 16½ columns, I.; p. 193; 2 columns, I.; p. 232, 6 columns; p. 343, 5 columns.
- THE THEORY OF BLASTING WITH HIGH EXPLOSIVES. By H. M. Thomas. E. & M. J., vol. 88, p. 349. 10½ columns. I.
- CONDITION AFFECTING LENGTH OF DRILL HOLE TO BE USED. E. & M. J., vol. 85, p. 440. 2 columns.
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- BLASTING DEEP HOLES. By O. H. Packer. Min. & Sci. Press, vol. 99, p. 328. 1½ columns.
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HANG FIRES: Delayed Shots. By W. Maurice. Min. & Sci. Press., vol. 96, p. 300. 1 $\frac{1}{2}$ columns.

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METHOD OF CHARGING PERMISSIBLE EXPLOSIVES. E. & M. J., vol. 89, p. 671. 1 $\frac{1}{2}$ columns.

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PREPARATIONS FOR BLASTING. By M. T. Hoster. E. & M. J., vol. 89, p. 1006. 2 $\frac{1}{2}$ columns.

BLASTING AND PREPARING THE SHOT. By D. H. Stovall. Min. & Sci. Press, vol. 98, p. 699. 1 $\frac{1}{2}$ columns.

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- GRADING ANALYSES AND THEIR APPLICATION.** By H. Stadler. T. I. M. & M., vol. 19, p. 471. 15 pages. I.
- SOURCES OF ERROR IN ANALYSES.** By R. C. Benner. Min. & Sci. Press, vol. 100, p. 492. 4 columns. I.
- GRADING ANALYSES.** By E. Stadler. M. & M., vol. 31, p. 344. 11 columns.
- CONTRIBUTIONS TO CHEMISTRY AND MINERALOGY FROM THE LABORATORY OF THE UNITED STATES GEOLOGICAL SURVEY.** By F. W. Clarke. U. S. G. S., Bull. 167. 166 pages. 1900.
- COMBINED OFFICE AND LABORATORY BUILDING.** By E. W. Buskett. E. & M. J., vol. 89, p. 1054. 2½ columns. I.
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- ANALYTICAL METHODS IN THE CAN-ANEA LABORATORY.** By F. G. Hawley. E. & M. J., vol. 90, p. 647. 12 columns.
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- DETECTION OF MERCURY IN NITRO-GLYCERINE.** P. C. M. & M. Soc. S. A., vol. 9, p. 214. 1½ columns.
- See also **TESTING EXPLOSIVES.**
- FRACTIONATION OF CRUDE PETROLEUM BY CAPILLARY FILTRATION.** By D. T. Day. U. S. G. S., Mineral Resources, 1907.
- THE FRACTIONATION OF CRUDE PETROLEUM BY CAPILLARY DIFFUSION.** By J. E. Gilpin and M. P. Cram. U. S. G. S., Bull. 365. 33 pages. 1908.
- RECTIFICATION OF NATURAL SULPHUR WATER.** By F. H. Mason. Min. & Sci. Press, vol. 98, p. 527. 1½ columns.
- See also **METHODS OF DETERMINING SULPHUR.**
- THE SANITARY VALUE OF WATER ANALYSIS.** P. C. M. & M. Soc. S. A., vol. 7, p. 93. ½ column.
- LISTS AND ANALYSES OF THE MINERAL SPRINGS OF THE UNITED STATES.** By A. C. Peale. U. S. G. S., Bull. 32. 235 pages. 1886.
- ANALYSES OF WATERS OF THE YELLOWSTONE NATIONAL PARK, WITH AN ACCOUNT OF THE METHODS OF ANALYSIS EMPLOYED.** By F. A. Gooch and J. E. Whitfield. U. S. G. S., Bull. 47. 84 pages. 1888.
- See also **POLLUTION AND PURIFICATION OF WATER.**
- THE REDUCTION OF CALCIUM SULPHATE BY CARBON MONOXIDE AND CARBON, AND THE OXIDATION OF CALCIUM SULPHIDE.** By H. O. Hoffman and W. Mostowitsch. T. A. I. M. E., vol. 41, p. 763. 24 pages. I.
- CHEMISTRY OF THE BROMO-CYANOGEN PROCESS.** By S. H. Worrell. Min. & Sci. Press, vol. 98, p. 356. 2½ columns.
- See also **CYANIDING OF ORES.**
- THE SEPARATION AND IDENTIFICATION OF THE MOST IMPORTANT CONSTITUENTS OF ESSENTIAL OILS.** By A. Hoffman. Sch. Mines Quart., vol. 30, p. 139. 5 pages.
- AUTOXIDATION OF ORGANIC COMPOUNDS.** By K. G. Falk. Sch. Mines Quart., vol. 29, p. 15. 9 pages.

- THE INFLUENCE OF MOIST AIR ON QUICKLIME.** By J. Gray. P. C. M. & M. Soc. S. A., vol. 9, p. 396. 2 columns.
- BACTERIA AS AGENT IN THE OXIDATION OF AMORPHOUS CARBON.** P. C. M. & M. Soc. S. A., vol. 9, p. 138. $\frac{1}{2}$ column.
- ENGINEERING CHEMISTRY IN CHEMICAL ENGINEERING.** By C. F. Mabery. P. Soc. P. E. E., vol. 15, p. 68. 10 pages.
- See also TECHNICAL EDUCATION.
- THE UTILIZATION OF ATMOSPHERIC AIR.** By A. Bernthsen. E. & M. J., vol. 88, p. 773. 11 columns.
- GEOCHEMISTRY: The Relation between Geology and Chemistry.** By G. T. Halloway. M. & M., vol. 30, p. 657, 6 columns; p. 757, 4 columns.
- THE DATA OF GEOCHEMISTRY.** By F. W. Clarke. U. S. G. S., Bull. 330. 716 pages. 1908.
- GEOCHEMISTRY.** By G. T. Halloway. M. & M., vol. 31, p. 26. 5 columns.
- GEOCHEMISTRY.** P. C. M. & M. Soc. S. A., vol. 9, p. 448. 2 columns.
- THE INTERACTION BETWEEN MINERALS AND WATER SOLUTIONS, WITH SPECIAL REFERENCE TO GEOLOGIC PHENOMENA.** By E. C. Sullivan. U. S. G. S., Bull. 312, 69 pages. 1907.
- See also THEORY OF ORE DEPOSITS.
- THE BLOW-PIPE AND ITS USE IN CHEMICAL ANALYSIS.** Min. Mag., vol. 1, p. 388, 8 pages, I.; p. 497, 2 pages; vol. 2, p. 153, 2 pages; vol. 3, p. 264, 4 pages; p. 476, 5 pages.
- See also MEASURES AND WEIGHTS.
- Determination of Bismuth, Molybdenum, Mercury, Tellurium, Wolfram, Etc.**
- AVOLUMETRIC METHOD FOR THE DETERMINATION OF MERCURY.** By W. H. Seamon. E. & M. J., vol. 87, p. 1047. 3 columns.
- PURIFICATION OF MERCURY.** P. C. M. & M. Soc. S. A., vol. 10, p. 224. $1\frac{1}{2}$ columns.
- THE JAMES APPARATUS FOR QUICK-SILVER DETERMINATION.** By G. A. James. E. & M. J., vol. 90, p. 800. 2 columns. I.
- A VOLUMETRIC METHOD FOR THE ESTIMATION OF MERCURY FULMINE.** P. C. M. & M. Soc. S. A., vol. 5, p. 86. $1\frac{1}{2}$ columns.
- EXTRACTION AND USE OF MOLYBDENUM.** P. C. M. & M. Soc. S. A., vol. 9, p. 171. 1 column.
- DETERMINATION OF MOLYBDENUM IN WULFENITE.** By J. C. Evans. Min. & Sci. Press., vol. 97, p. 161. $1\frac{1}{2}$ columns.
- DETERMINATION OF ALUNITE.** By R. B. Gage. E. & M. J., vol. 87, p. 1122. $5\frac{1}{2}$ columns.
- DETERMINATION OF ALUNITE.** E. & M. J., vol. 88, p. 31. 1 column.
- DETERMINATION OF ALUNITE.** E. & M. J., vol. 88, p. 743. 1 column.
- VOLUMETRIC DETERMINATION OF URANIUM AND VANADIUM.** E. & M. J., vol. 87, p. 155. $1\frac{1}{2}$ columns.
- VOLUMETRIC ESTIMATION OF URANIUM AND VANADIUM.** Min. & Sci. Press., vol. 100, p. 160. $\frac{1}{2}$ column.
- DETERMINATION OF VANADIUM.** P. C. M. & M. Soc. S. A., vol. 10, p. 294. $1\frac{1}{2}$ columns.
- DETERMINATION OF VANADIUM.** By Arden M. Wilson. E. & M. J., vol. 85, p. 962. $1\frac{1}{2}$ columns.
- COLORIMETRIC ESTIMATION OF SELENIUM.** P. C. M. & M. Soc. S. A., vol. 6, p. 279. $1\frac{1}{2}$ columns.
- DETERMINATION OF TITANIUM.** E. & M. J., vol. 85, p. 1200. $\frac{1}{2}$ column.
- VOLUMETRIC METHOD FOR DETERMINING ALUMINA.** E. & M. J., vol. 88, p. 1283. 2 columns.
- DETERMINATION OF FLUORINE.** By C. A. Heberlein. Min. & Sci. Press., vol. 95, p. 591. 1 column. I.

THE ESTIMATION OF GRAPHITE. P. C. M. & M. Soc. S. A., vol. 9, p. 128. 1 column.

CHEMISTRY OF MANGANESE. By E. C. Harder. U. S. G. S., Bull. 427. 208 pages. I.

ANALYSES OF SAMPLES OF ASPHALTITE. T. A. I. M. E., vol. 40, p. 280. Tables.

ANALYSIS OF GAS COAL. Min. Mag., vol. 6, p. 15. 11½ pages.

VOLUMETRIC DETERMINATION OF MAGNESIUM. Min. & Sci. Press, vol. 96, p. 571. ½ column.

QUANTITATIVE FIELD-TEST FOR MAGNESIA IN CEMENT-ROCK AND LIMESTONE. By C. Catlett. T. A. I. M. E., vol. 38, p. 705. 4 pages.

THE DETECTION AND IDENTIFICATION OF MANGANESE AND CHROMIUM. E. & M. J., vol. 86, p. 322. ½ column.

METHOD OF ANALYZING ATACAMITE. By F. D. Aller. E. & M. J., vol. 89, p. 1006. ½ column.

A NEW RAPID VOLUMETRIC METHOD FOR THE DETERMINATION OF NIOBIUM IN THE PRESENCE OF TANTALUM AND ITS APPLICATION TO THE ANALYSES OF NIOBIUM MINERALS. By F. J. Metzger and C. E. Taylor. Sch. Mines Quart., vol. 30, p. 323. 12 pages.

Acid Manufacture

THE MANUFACTURE OF SULPHURIC ACID AND ITS USES IN METALLURGY. By W. H. Mandsley. T. Au. I. M. E., vol. 6, p. 93. 32 pages.

SULPHURIC ACID LEAD CHAMBER CONSTRUCTION. By F. J. Falding. E. & M. J., vol. 88, p. 441. 11½ columns. I.

SMELTERY SMOKE AS A SOURCE OF SULPHURIC ACID. By W. H. Free-land and C. N. Renwick. E. & M. J., vol. 89, p. 1116. 10½ columns. I.

DETERMINATION OF SULPHURIC ANHYDRIDE IN SULPHURIC ACID. By E. W. Buskett. E. & M. J., vol. 86, p. 407. 1½ columns.

THE MANUFACTURE OF NITRIC ACID FROM AIR. E. & M. J., vol. 88, p. 65. 1 column.

Mineral Analysis

DETERMINATION OF SILICA. Min. & Sci. Press, vol. 99, p. 559. ¼ column.

THE CONSTITUTION OF THE SILICATES. By F. W. Clarke. U. S. G. S., Bull. 125. 109 pages. 1895.

THE ACTION OF AMMONIUM CHLORIDE UPON SILICATES. By F. W. Clarke and G. Steiger. U. S. G. S., Bull. 207. 57 pages. 1902.

THE ANALYSIS OF SILICATE AND CARBONATE ROCKS. By W. F. Hillebrand. U. S. G. S., Bull. 422. 239 pages. 1910.

THE ANALYSIS OF SILICATE AND CARBONATE ROCKS. By W. F. Hillebrand. U. S. G. S., Bull. 305. 200 pages. 1906.

CHEMICAL ANALYSES OF IGNEOUS ROCKS, WITH A CRITICAL DISCUSSION OF THE CHARACTER AND USE OF ANALYSES. By H. S. Washington. U. S. G. S., Professional Paper 14. 495 pages. 1903.

CHEMICAL COMPOSITION OF IGNEOUS ROCKS EXPRESSED BY MEANS OF DIAGRAMS, WITH REFERENCE TO ROCK CLASSIFICATION ON A QUANTITATIVE CHEMICO-MINERALOGICAL BASIS. By J. P. Iddings. U. S. G. S., Professional Paper 18. 98 pages. I. 1903.

THE SUPERIOR ANALYSES OF IGNEOUS ROCKS FROM ROTH'S TABELLEN, 1869 TO 1884, ARRANGED ACCORDING TO THE QUANTITATIVE SYSTEM OF CLASSIFICATION. By H. S. Washington. U. S. G. S., Professional Paper 28. 68 pages. 1904.

SOME PRINCIPLES AND METHODS OF ROCK ANALYSIS. By W. F. Hillebrand. U. S. G. S., Bull. 176. 114 pages. 1900.

MINERAL ANALYSES FROM THE LABORATORIES OF THE UNITED STATES GEOLOGICAL SURVEY, 1880-1903. By F. W. Clarke. U. S. G. S., Bull. 220. 119 pages. 1903.

ANALYSES OF ROCKS, WITH A CHAPTER ON ANALYTICAL METHODS, 1880 TO 1896. By F. W. Clarke and W. F. Hillebrand. U. S. G. S., Bull. 148. 306 pages. 1897.

ERRORS IN THE CHEMICAL ANALYSIS OF GYPSUM. By G. Steiger. U. S. G. S., Bull. 413. 37 pages. I. 1910.

ANALYSES OF ROCKS. By F. W. Clarke. U. S. G. S., Bull. 168, 308 pages, 1900; Bull. 228, 375 pages, 1904; Bull. 419, 323 pages, 1910.

Determination of Antimony, Arsenic, etc.

ARSENIC DETERMINATION. M. & M., vol. 29, p. 508. 1 column.

RAPID ESTIMATION OF ARSENIC. E. & M. J., vol. 87, p. 945. 2 columns.

A RAPID METHOD FOR THE ESTIMATION OF ARSENIC IN ORES. By H. E. Hooper. T. I. M. & M., vol. 17, p. 331. 2½ pages.

DETERMINATION OF ANTIMONY AND ARSENIC IN ALLOYS. E. & M. J., vol. 85, p. 1278. 1½ columns.

SEPARATION OF ARSENIC AND ANTIMONY BY MEANS OF KNORR DISTILLATION APPARATUS. By W. C. Smith. E. & M. J., vol. 88, p. 1062. 2 columns. I.

NEW METHOD FOR DETERMINING ANTIMONY. E. & M. J., vol. 88, p. 209. 1 column.

VOLUMETRIC DETERMINATION OF ANTIMONY. M. & M., vol. 29, p. 476. 1 column.

DETERMINATION OF ANTIMONY. E. & M. J., vol. 87, p. 497. 1½ columns.

VOLUMETRIC ESTIMATION OF ANTIMONY. P. C. M. & M. Soc. S. A., vol. 7, p. 297. 2 columns.

DETERMINATION OF TIN AND ANTIMONY. By E. B. Van Osdel. E. & M. J., vol. 87, p. 850. ¼ column.

Methods of Determining Sulphur

DETERMINATION OF SULPHUR. By A. C. De Jough. E. & M. J., vol. 85, p. 112. ¼ column.

DETERMINATION OF SULPHUR AND ARSENIC. E. & M. J., vol. 85, p. 1048. ¼ column.

EFFECT OF PRESSURE ON THE BOILING POINT OF SULPHUR. P. C. M. & M. Soc. S. A., vol. 9, p. 249. 1 column.

NOTE ON A DEPOSIT OF SULPHUR IN A COLLIERY WATER. By G. H. Stanley. T. I. M. E., vol. 36, p. 223. 4 pages.

See also **CHEMISTRY: METHODS AND PRACTICE.**

Gold and Silver Analysis

PLATTNER'S TEST FOR GOLD ORES. Min. Mag., vol. 6, p. 52. 2 pages.

DETERMINATION OF GOLD IN AURIFEROUS SANDS BY THE WET METHOD. P. C. M. & M. Soc. S. A., vol. 7, p. 374. ¼ column.

METHOD FOR ANALYSIS OF GOLD-SILVER BULLION. P. C. M. & M. Soc. S. A., vol. 8, p. 86. 5 columns.

DETERMINATION OF GOLD IN COPPER BULLION. By F. F. Hunt. E. & M. J., vol. 87, p. 465. ¼ column.

THE ANALYSIS OF CHLORIDIZED ORES. By P. J. Thibault. T. Au. I. M. E., vol. 7, p. 72. 10 pages.

See also the **CHLORINATION PROCESS.**

Paint Manufacture

BLAIR'S ZINC-LEAD PIGMENT PLANT. By J. I. Blair. M. & M., vol. 31, p. 698. 4½ columns. I.

THE USE OF COBALT OXIDE FOR MAKING PIGMENTS. By J. J. McEachern. J. C. M. I., vol. 13, p. 605. 15½ pages.

TESTS FOR PAINTS. P. C. M. & M. Soc. S. A., vol. 7, p. 51. 1 column.

ZINC OXIDE MANUFACTURE. By W. F. Gordon. Min. & Sci. Press, vol. 100, p. 390. 1½ columns.

SOUTHERN RED HEMATITE AS AN INGREDIENT OF METALLIC PAINT. By E. F. Burchard. U. S. G. S., Bull. 315, p. 430. 5 pages. 1906.

SOME IMPORTANT PAINT TESTS. By G. B. Heckel. E. & M. J., vol. 85, p. 1099. 1 column.

Methods of Determining Lead

VOLUMETRIC ESTIMATION OF LEAD. E. & M. J., vol. 86, p. 77. 1 column.

RAPID DETERMINATION OF LEAD IN CHILLED BLAST-FURNACE SLAGS. By F. S. Schrimmerka. E. & M. J., vol. 89, p. 467. 2½ columns.

DETERMINATION OF LEAD AND CADMIUM IN SPELTER. By E. J. Ericson. E. & M. J., vol. 87, p. 1036. 3 columns.

PEROXIDE METHOD FOR DETERMINING LEAD. E. & M. J., vol. 87, p. 262. 1½ columns.

DETERMINATION OF LEAD IN SPELTER AND IN ORES. By E. J. Ericson. E. & M. J., vol. 86, p. 178. 6 columns.

DETERMINATION OF LEAD IN NICKEL ORES. Min. & Sci. Press, vol. 97, p. 129. ½ column.

ELECTROLYTIC DETERMINATION OF LEAD IN ORES. By R. C. Benner and W. H. Ross. Min. & Sci. Press, vol. 101, p. 642. 3½ columns. D.

THE LITHARGE METHOD. P. C. M. & M. Soc. S. A., vol. 8, p. 154. 1½ columns.

Methods of Determining Zinc

CONTRIBUTIONS TO THE CHEMISTRY OF ZINC SMELTING. E. & M. J., vol. 88, p. 604. 1 column.

ANALYSIS OF MINERALS CONTAINING ZINC. P. C. M. & M. Soc. S. A., vol. 7, p. 372. 1½ columns.

DELICATE METHOD OF PRECIPITATING ZINC. P. C. M. & M. Soc. S. A., vol. 7, p. 298. Note.

ELECTROLYTIC DETERMINATION OF ZINC. E. & M. J., vol. 86, p. 372. 1½ columns.

A STUDY OF THE FERROCYANIDE METHOD FOR THE DETERMINATION OF ZINC. P. C. M. & M. Soc. S. A., vol. 7, p. 373. 2 columns.

Chemical Analysis in Cyaniding

CHEMISTRY OF THE CYANIDE PROCESS. By W. H. Seamon. M. & M., vol. 31, p. 689. 2½ columns.

THE ESTIMATION OF SULPHO- AND FERROCYANIDES, ETC., IN CYANIDE SOLUTIONS CONTAINING COPPER. By L. M. Green. T. I. M. & M., vol. 18, p. 59. 7 pages.

ERRORS DUE TO THE PRESENCE OF POTASSIUM IODIDE IN TESTING CYANIDE SOLUTIONS FOR PROTECTIVE ALKALINITY. By B. Collingridge. T. I. M. & M., vol. 19, p. 299. 12 pages.

ERRORS IN TESTING CYANIDE SOLUTIONS. E. & M. J., vol. 89, p. 1101. 1½ columns.

RAPID ANALYSIS OF COMMERCIAL CYANIDE. By R. Bell. E. & M. J., vol. 89, p. 1114. 3½ columns.

METHOD FOR DETERMINING POTASSIUM IN SODIUM CYANIDE. By J. E. Clennel. E. & M. J., vol. 89, p. 1309. 1 column.

DUTIES OF THE CYANIDE CHEMIST. E. & M. J., vol. 86, p. 759. 2½ columns.

THE CHEMISTRY OF SILVER SULPHIDE CYANIDATION. By W. A. Caldecott. E. & M. J., vol. 85, p. 1295. 2 columns.

COMMERCIAL POTASSIUM CYANIDE. E. & M. J., vol. 89, p. 1307. 4 columns.

COMMERCIAL SODIUM AND POTASSIUM CYANIDE. By W. J. Sharwood. E. & M. J., vol. 89, p. 614. 5½ columns.

SPURIOUS POTASSIUM CYANIDE. E. & M. J., vol. 89, p. 156. 2½ columns.

See also CYANIDING OF ORES.

DETERMINATION OF ALKALINITY. M. & M., vol. 31, p. 478. 1½ columns.

TITRATING FOR PROTECTIVE ALKALINITY. By H. L. Sulman and F. Reade. M. & M., vol. 31, p. 479. 1 column.

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See also CYANIDING GOLD, ETC.

Determination of Cobalt, Nickel, Tungsten, and Tin

DETERMINATION OF NICKEL. E. & M. J., vol. 85, p. 910. ¼ column.

ELECTROLYTIC DETERMINATION OF NICKEL. By V. P. Davis. E. & M. J., vol. 87, p. 590. 1 column.

See also ELECTROLYTIC ANALYSIS.

A NEW DIRECT METHOD FOR DETERMINING NICKEL IN STEEL. By H. Grossmann and W. Heilborn. E. & M. J., vol. 87, p. 912. 1½ columns.

DICYANDIAMIDE IN THE DETERMINATION AND SEPARATION OF NICKEL. By H. Grossmann and B. Schueck. E. & M. J., vol. 85, p. 1044. 2 columns.

QUANTITATIVE ANALYSIS OF NICKEL IN COBALT. P. C. M. & M. Soc. S. A., vol. 8, p. 221. 1 column.

VOLUMETRIC DETERMINATION OF COBALT. E. & M. J., vol. 88, p. 256. 1½ columns.

VOLUMETRIC DETERMINATION OF TUNGSTEN. E. & M. J., vol. 89, p. 382. ¼ column.

THE DETERMINATION OF TUNGSTIC ACID IN LOW-GRADE ORES. E. & M. J., vol. 87, p. 1141. 2½ columns.

THE DETERMINATION OF TUNGSTIC ACID IN LOW-GRADE WOLFRAM ORES. By H. W. Hutchin and F. J. Tonks. T. I. M. & M., vol. 18, p. 425. 14 pages.

ANALYSIS OF BABBITT METAL. E. & M. J., vol. 88, p. 677. 1½ columns.

A RAPID METHOD OF BABBITT METAL ANALYSIS. P. C. M. & M. Soc. S. A., vol. 7, p. 50. 1 column.

Coal Analysis

ACCURACY OF COAL ANALYSIS. P. C. M. & M. Soc. S. A., vol. 9, p. 132. 2 columns.

ANALYSES OF BERING RIVER COALS, ALASKA. E. & M. J., vol. 90, p. 272. Table.

THE ANALYSIS OF COAL. By N. W. Ford. M. & M., vol. 30, p. 85. 5½ columns.

ANALYSIS OF WEST VIRGINIA COALS. M. & M., vol. 29, pp. 305, 306, and 307. Tables.

CHEMICAL ANALYSES OF COALS TESTED AT THE UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By J. S. Butrows. U. S. G. S., Bull. 362. 23 pages. 1908.

See also TESTING FUELS AND THEIR VALUE.

METHODS OF ANALYZING ILLINOIS COALS. T. A. I. M. E., vol. 40, p. 21. 3 pages.

ANALYSIS OF ILLINOIS COALS. T. A. I. M. E., vol. 40, p. 5. 1 page. Tables; pp. 22 and 23.

CHEMICAL CONTROL OF COAL WASHERS. By R. Bolling. E. & M. J., vol. 86, p. 424. 8 columns. I.

THERMOCHEMISTRY OF ANTHRACITE. M. & M., vol. 30, p. 603. 4 columns.

ESTIMATION OF ASH IN COKE. By H. E. Hooper. E. & M. J., vol. 87, p. 899. 1½ columns.

See also COKE: ITS PROPERTIES AND MANUFACTURE.

Methods of Determining Copper

VOLUMETRIC DETERMINATION OF COPPER. M. & M., vol. 30, p. 260. ½ column.

A NEW VOLUMETRIC METHOD FOR COPPER AND THE ORES OF COPPER. By A. Adair. P. C. M. & M. Soc. S. A., vol. 6, p. 188, 4 columns; p. 275, 1 column.

A NEW VOLUMETRIC ASSAY FOR COPPER. E. & M. J., vol. 85, p. 1197. 2 columns.

IODOMETRIC DETERMINATION OF COPPER. E. & M. J., vol. 85, p. 604. 1 column.

PERMANGANATE METHOD FOR DETERMINING COPPER. By F. G. Hawley. E. & M. J., vol. 86, p. 1155. 2½ columns.

THIOCYANATE DETERMINATION OF COPPER. By W. Tsukakaski. E. & M. J., vol. 90, p. 969. 1½ columns.

RAPID ELECTROLYTIC DETERMINATION OF COPPER. By R. C. Benner. E. & M. J., vol. 90, p. 517. 5½ columns. I.

THE DETERMINATION OF COPPER IN COPPER-BISMUTH ORES. By C. C. O'Loughlin. Min. & Sci. Press, vol. 101, p. 238. ¾ column.

THE ELECTROLYTIC DETERMINATION OF COPPER AT TENNESSEE COPPER COMPANY. By T. W. Cavers and J. P. Chadwick. E. & M. J., vol. 89, p. 954. 3 columns.

COMPARISON OF THE IODIDE CYANIDE AND ELECTROLYTIC METHODS FOR COPPER. E. & M. J., vol. 87, p. 159. 1½ columns.

THE EFFECT OF THE PRESENCE OF CERTAIN "ADDITION-AGENTS" UPON THE DENSITY AND THE COHERENCE OF ELECTROLYTICALLY DEPOSITED COPPER, LEAD AND SILVER. By R. P. Jarvis and E. F. Kern. Sch. Mines Quart., vol. 30, p. 100. 29 pages. I.

See also ELECTROLYTIC ANALYSIS.

RAPID METHOD FOR DETERMINING COPPER IN SLAGS. By F. D. Aller. E. & M. J., vol. 88, p. 1278. 1½ columns.

RAPID METHOD OF DETERMINING COPPER IN SLAGS. By A. W. Diack and T. Smith. E. & M. J., vol. 89, p. 553. 2 columns.

DETERMINATION OF SMALL QUANTITIES OF COPPER IN SLAG. By C. A. Heberlein. E. & M. J., vol. 89, p. 306. 1 column.

DETERMINATION OF COPPER. E. & M. J., vol. 87, p. 1041. 1 column.

A DELICATE COLOR REACTION FOR COPPER. P. C. M. & M. Soc. S. A., vol. 7, p. 296. ¼ column.

SOME ANALYSES OF COPPER BLAST-FURNACE SLAGS AND DETERMINATION OF THEIR MELTING POINTS. By A. T. French. T. I. M. & M., vol. 19, p. 263. 12 pages. D.

See also METALLURGY OF COPPER.

Electrolytic Analysis

RAPID ELECTROLYTIC METHOD OF ANALYSIS. By R. C. Benner. Min. & Sci. Press, vol. 101, p. 576. 3 columns.

ELECTROLYTIC DETERMINATION OF BISMUTH. E. & M. J., vol. 86, p. 115. ½ column.

ELECTROCHEMICAL ANALYSIS WITH ROTATING ANODES. E. & M. J., vol. 85, p. 956. 2 columns.

A NEW APPARATUS FOR ELECTROLYTIC DETERMINATION OF METALS. E. & M. J., vol. 86, p. 314. 1½ columns.

See also METHODS OF DETERMINING COPPER.

Methods of Determining Iron

ANALYSES OF THE CLINTON IRON-ORE OF ALABAMA. T. A. I. M. E., vol. 40, p. 86. Table.

ANALYSES OF THE CLINTON IRON-ORES, HUNTINGDON COUNTY, PENNSYLVANIA. T. A. I. M. E., vol. 40, p. 143. 2 pages. Tables.

ANALYSES OF CLINTON OÖLITIC IRON-ORE, NEW YORK STATE. T. A. I. M. E., vol. 40, p. 174. Table.

DETERMINATION OF IRON IN BRASS AND BRONZE. E. & M. J., vol. 88, p. 1269. 1 column.

TESTS OF IRON: Chemical Analysis. Min. Mag., vol. 3, p. 25. 4 pages.

THE STANDARDIZATION OF POTASSIUM PERMANGANATE SOLUTION AND ITS

SUBSEQUENT USE IN TITRATING IRON. By C. Offerhaus and E. H. Fischer. Sch. Mines Quart., vol. 30, p. 40. 4 pages.

THE FERRITES, COMPOUNDS OF AN IRON ACID. By J. S. C. Wells. E. & M. J., vol. 86, p. 420. 6 columns.

COMPRESSED AIR IN MINING

General

SIMPLE PROBLEMS IN AIR-COMPRESSION. By E. A. Rix. Min. & Sci. Press, vol. 96, p. 394. 7½ columns.

COMPRESSED AIR CALCULATION SHORT CUTS. By S. B. Redfield. E. & M. J., vol. 88, p. 1163. 3½ columns. D.

STORING COMPRESSED AIR IN A NATURAL ROCK RECEIVER. E. & M. J., vol. 89, p. 406. 1 column.

COMPRESSED AIR IN MINES. By W. L. Saunders. E. & M. J., vol. 89, p. 500. 3 columns.

See also COMPRESSED AIR PUMPING AND COMPRESSED AIR HAULAGE.

MOISTURE IN THE ATMOSPHERE AND ITS EFFECT ON THE OPERATION OF COMPRESSED AIR MACHINERY. By H. M. P. Murphy. Min. & Sci. Press, vol. 97, p. 257. 7½ columns. Tables.

OIL HEATER FOR COMPRESSED AIR. Min. & Sci. Press, vol. 100, p. 929. 1½ columns. I.

AIR ECONOMY IN ROCK DRILLS. By A. West. E. & M. J., vol. 87, p. 895. 3 columns. I.

See also MACHINE DRILLS.

HIGH vs. LOW PRESSURE FOR COMPRESSED AIR IN MINES. By Robt. B. Brinsmade. E. & M. J., vol. 85, p. 161. 3½ columns.

TEST ON A MODERN AIR-COMPRESSING PLANT AT THE LONG TUNNEL GOLD MINE, WALHALLA, AUSTRALIA. By E. J. Rigby. T. Au. I. M. E., vol. 5, p. 259. 17 pages. I.

LOSS OF OXYGEN IN HYDRAULIC AIR COMPRESSION. By O. H. Landreth. E. & M. J., vol. 90, p. 508. 1 column.

STEAM CONSUMPTION OF AIR COMPRESSORS. By W. A. Macleod and J. P. Wood. T. Au. I. M. E., vol. 12, p. 165. 16 pages. D.

POWER AT COBALT. E. & M. J., vol. 88, p. 171. 1½ columns.

INEFFICIENCY OF COMPRESSED AIR SYSTEM, RAND MINES. E. & M. J., vol. 85, p. 549. 1½ columns.

THE TRANSMISSION OF POWER BY COMPRESSED AIR IN MINES. By R. W. Chapman. T. Au. I. M. E., vol. 10, p. 309. 17 pages.

See also POWER TRANSMISSION, ETC.

See also COMPRESSED AIR PUMPING.

See also CYANIDING GOLD, ETC., and COST OF POWER.

Air Compressors, Types, Operation, Etc.

SMALL AIR COMPRESSORS AT MINES. M. & M., vol. 31, p. 477. 1 column.

TWO-STAGE AIR-LIFT COMPRESSOR. Min. Mag., vol. 4, p. 141. 1 column. I.

CENTRIFUGAL AIR COMPRESSOR. M. & M., vol. 29, p. 279. 1½ columns. I.

TURBOBLOWERS AND COMPRESSORS. M. & M., vol. 31, p. 285. 3 columns. I.

- AIR COMPRESSING MACHINERY.** By J. Savaas. T. Au. I. M. E., vol. 8, pt. 2, p. 215. 12½ pages. I.
- ELECTRIC AIR COMPRESSOR.** By J. A. SEAGER. M. & M., vol. 31, p. 263. 1 column. I.
- IMPROVEMENTS IN COMPRESSOR VALVES.** E. & M. J., vol. 88, p. 915. 2½ columns. I.
- AIR COMPRESSOR VALVES.** E. & M. J., vol. 88, p. 1180. 2 columns.
- A CENTRAL COMPRESSED-AIR SCHEME.** Min. & Sci. Press, vol. 97, p. 537. 1½ columns.
- DESCRIPTION OF THE COMPRESSED AIR ENGINE AT GOVAN COLLIERY.** By W. C. Randolph. Min. Mag., vol. 9, p. 51. 2½ pages.
- SOME AIR COMPRESSOR TESTS.** By W. A. Macleod and J. P. Wood. T. Au. I. M. E., vol. 13, p. 59. 2 pages. D.
- COMPRESSED AIR BY WATER.** By G. C. McFarlane. Min. & Sci. Press, vol. 100, p. 281. 6½ columns. I.
- McFARLANE HYDRAULIC COMPRESSOR.** E. & M. J., vol. 86, p. 716. 1½ columns. I.
- BLAKNEY HYDRAULIC AIR COMPRESSOR.** E. & M. J., vol. 87, p. 841. ½ column. I.
- HYDRAULIC AIR COMPRESSION.** By E. B. Wilson. M. & M., vol. 31, p. 129. 4½ columns. I.
- COBALT HYDRAULIC AIR COMPRESSOR.** By C. H. Taylor. M. & M., vol. 30, p. 532. 5 columns. I.
- Compressed Air Haulage**
- NEW COMPRESSED AIR LOCOMOTIVE.** E. & M. J., vol. 89, p. 1187. 2 columns. I.
- Explosion in Air Compressors, Diseases, Etc.**
- DISASTROUS AIR EXPLOSIONS: Explosions in Air Compressors.** M. & M., vol. 31, p. 683. ½ column.
- See also CAUSES OF ACCIDENTS.
- EXPLOSION IN COMPRESSED-AIR MAIN.** By J. A. Burgess. Min. & Sci. Press, vol. 97, p. 253. ¾ column. I.

CLAYS AND THEIR USES

General

- A BIBLIOGRAPHY OF CLAYS AND THE CERAMIC ARTS.** By J. C. Branner. U. S. G. S., Bull. 143. 114 pages. 1896.
- TECHNOLOGY OF CLAY INDUSTRY.** By H. Ries. U. S. G. S., 16th Ann. Rept., pt. 4. 52 pages.
- CHINA-CLAY: Its Nature and Origin.** By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.
- CLAY PRODUCTS SECTION OF THE TECHNOLOGIC BRANCH OF THE UNITED STATES GEOLOGICAL SURVEY.** By A. V. Bleining. P. E. Soc. W. Pa., vol. 25, p. 565. 38 pages. D.
- See also OCCURRENCE OF WORKABLE CLAYS.
- Properties of Clays and Methods of Testing**
- CHINA-CLAY: Its Nature and Origin.** By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.

THE COLLOID MATTER OF CLAY. By H. E. Ashley. U. S. G. S., Bull. 388. 65 pages. I. 1909.

EFFECT OF TANNIN ON CLAY. By H. Ries. U. S. G. S., Mineral Resources, 1902.

CLAY MINING AND COAL MINING. By R. R. Hice. M. & M., vol. 30, p. 223. 4½ columns.

See also OCCURRENCE OF WORKABLE CLAYS.

Brick and Clay Products

SAND-LIME BRICK INDUSTRY. By S. V. Peppel. U. S. G. S., Mineral Resources, 1903. 23 pages.

SAND LIME BRICKS. By H. Gerlings. P. C. M. & M. Soc. S. A., vol. 5, p. 124. 7 columns; p. 155, ½ column; p. 205, ½ column; p. 229, 6½ columns.

See also MINING DISTRICTS.

CONCENTRATION

General

CONCENTRATION METHODS EMPLOYED IN AUSTRALIA. T. Au. I. M. E., vol. 12, p. 105. 26 pages. Flow sheets.

ORE CONCENTRATION. P. C. M. & M. Soc. S. A., vol. 8, p. 393. 2 columns.

ON DRESSING OF ORES. Min. Mag., vol. 9, p. 56. 4 pages; vol. 8, p. 535, 3 pages.

DEVELOPMENTS IN GOLD-EXTRACTING MACHINERY, AND SOME CAUSES OF FAILURE. By J. W. Jaffray. T. Au. I. M. E., vol. 4, p. 56. 38 pages.

SILVER AND THE PRESENT STATE OF ITS WINNING FROM ARGENTIFEROUS ORES. By A. Trippel. Min. Mag., vol. 4, p. 153, 17½ pages; p. 327, 12 pages.

See also CYANIDING OF ORES.

CALCULATION OF RECOVERY IN CONCENTRATION. By T. J. Hoover. E. & M. J., vol. 89, p. 1234. 4 columns.

CALCULATION OF RECOVERY IN CONCENTRATION. E. & M. J., vol. 90, p. 301. 1½ columns. Table.

CALCULATION OF PERCENTAGE OF RECOVERY. By T. J. Hoover. Min. Mag., London, vol. 3, p. 119. 7½ columns. D.

TREATMENT PROBLEM OF THE REPUBLIC (WASHINGTON) GOLD ORES. By F. Cirkel. E. & M. J., vol. 85, p. 246. 4½ columns.

MEASUREMENT OF PULP AND TAILING. By W. J. Sharwood. Min. Mag., London, vol. 2, p. 45. 18 columns. I.

TESTING MILL-TAILING. By W. E. Dartow. Min. & Sci. Press, vol. 95, p. 301. 2 columns.

ELIMINATING DUST FROM ANTHRACITE BREAKER. By J. J. Jones. E. & M. J., vol. 89, p. 733. 5 columns. I.

See also THE WASTE OF COAL AND ITS UTILIZATION.

GOOD MANAGEMENT AND ORE-DRESSING BY AUTOMATIC MACHINERY. By H. W. F. Kayser. T. Au. I. M. E., vol. 2, p. 98. 7 pages. I.

See also MANAGEMENT OF MINES.

WITTS' FRICTION PROCESS OF ORE-DRESSING. P. C. M. & M. Soc. S. A., vol. 7, p. 14. 5 columns. I.

See also COST OF MILLING.

Preparation of Coal

COAL-WASHING PLANT OF THE STAG CAÑON FUEL Co.'s OPERATIONS, NEW MEXICO. T. A. I. M. E., vol. 40, p. 363. 8 pages. I.

COAL-TESTING IN THE UNITED STATES. P. C. M. & M. Soc. S. A., vol. 7, p. 193. 4 columns.

See also TESTING PLANTS.

COAL WASHERY PLANT CONTROL. By G. R. Delamater. M. & M., vol. 30, p. 55. 7 columns. I.

See also WASHING COAL AND MINERAL.

PARABOLIC COAL PICKING PLATE. M. & M., vol. 30, p. 597. $\frac{3}{4}$ column. I.

A NEW SEPARATOR FOR THE REMOVAL OF SLATE FROM COAL. By W. S. Ayres. T. A. I. M. E., vol. 40, p. 648. 7 pages. I.

CLEANING COAL BY THE DRY PROCESS. M. & M., vol. 30, p. 335. 2 columns. I.

See also DRY CONCENTRATION.

THE BEAVER BROOK BREAKER. By T. M. Dodson. M. & M., vol. 30, p. 706. $6\frac{1}{2}$ columns. I.

THE TAYLOR CONCRETE BREAKER. By E. B. Wilson. M. & M., vol. 31, p. 272. $1\frac{1}{2}$ columns. I.

THE PECK SHAFT BREAKER. By E. B. Wilson. M. & M., vol. 31, p. 513. 6 pages. I.

THE RECOVERY OF ANTHRACITE FROM CULM BANKS. By R. Lee. E. & M. J., vol. 85, p. 720. 7 columns. I.

See also PACKING MINE WORKINGS.

Testing Plants and Laboratories

ORE TESTING AT SALT LAKE. By E. Gayforth. Min. & Sci. Press, vol. 96, p. 134. 4 columns. I.

THE CALIFORNIA ORE TESTING COMPANY: Equipment of Plant and Flow-sheet. Min. & Sci. Press, vol. 95, p. 273. 2 columns. I.

Theory of Concentration

NOTES ON MILLING. By W. Beaver. P. C. M. & M. Soc. S. A., vol. 6, p. 215, 5 columns; p. 253, $2\frac{1}{2}$ columns; p. 275, $2\frac{1}{2}$ columns; p. 315, 1 column; p. 341, 1 column; p. 365, 5 columns. I.

THEORY OF THE SETTLEMENT OF SLIME. P. C. M. & M. Soc. S. A., vol. 10, p. 149. 3 columns.

THEORY OF THE SETTLEMENT OF SLIMES. By H. G. Nichols. Min. & Sci. Press, vol. 97, p. 54. $4\frac{1}{2}$ columns. D.

THEORY OF THE SETTLEMENT OF SLIMES. By H. E. Ashley. Min. & Sci. Press, vol. 98, p. 831. 4 columns. D.

THEORY OF CLASSIFICATION. E. & M. J., vol. 89, p. 570. 7 columns.

THEORY OF COAL WASHING. P. E. Soc. W. Pa., vol. 23, p. 203. 18 pages. I.

See also PREPARATION OF COAL and WASHING COAL AND MINERAL.

FREE AND HINDERED SETTLING OF MINERAL GRAINS. By A. O. Christensen. E. & M. J., vol. 88, p. 503. 18 columns. I.

DEVELOPMENT OF HINDERED-SETTLING APPARATUS. By R. H. Richards. T. A. I. M. E., vol. 41, p. 396. 58 pages. I.

VELOCITY OF GALENA AND QUARTZ FALLING IN WATER. By R. H. Richards. T. A. I. M. E., vol. 38, p. 210. 26 pages. I.

SUBSIDENCE OF FINE PARTICLES IN LIQUIDS. By C. Barus. U. S. G. S., Bull. 36. 54 pages. 1886.

A NEW METHOD OF OBTAINING THE DENSITY OF SETTLED SAND. By D. I. R. Simpson. P. C. M. & M. Soc. S. A., vol. 7, p. 158. 2 columns. I.

SPECIFIC GRAVITY OF CONCENTRATE. By E. B. Van Osdel. Min. & Sci. Press, vol. 98, p. 667. $\frac{1}{2}$ column.

SOLUTIONS OF HIGH SPECIFIC GRAVITY. P. C. M. & M. Soc. S. A., vol. 6, p. 278. Note.

THE THOULET SOLUTION IN ORE TESTING. By H. B. Hallowell. M. & M., vol. 30, p. 531. $1\frac{1}{2}$ columns. I.

VOIDS IN SAND AND BROKEN STONE. Min. & Sci. Press, vol. 101, p. 579. $\frac{1}{2}$ column.

MINERAL RELATIONS FROM THE LABORATORY VIEWPOINT. By A. L. Day. Min. & Sci. Press, vol. 100, p. 680. $\frac{1}{2}$ column.

See also TESTING PLANTS AND LABORATORIES.

EXPERIMENTAL WORK IN ORE CONCENTRATION. By J. A. Davis. E. & M. J., vol. 86, p. 904. 7 columns. I.

GRAPHIC METHODS FOR CONCENTRATION. By W. J. Sharwood. Min. Mag., London, vol. 3, p. 428. 2½ columns.

Launders and Distributors

LAUNDERS IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 823. 1½ columns.

THE CARRYING CAPACITY OF LAUNDERS. By W. C. Browning. M. & M., vol. 29, p. 300. 5 columns. I.

PULP DISTRIBUTOR IN THE JOPLIN DISTRICT. E. & M. J., vol. 89, p. 953. 1 column. I.

See also PIPES AND PIPE FITTINGS.

Jigs and Jigging

THE FIRST JIG USED IN CLEANING ANTHRACITE COAL. Coal Mining Supplement, E. & M. J., vol. 88, p. 3. 1 column.

FIRST PRACTICAL APPLICATION OF THE FOUST JIG. By Doss Brittain. E. & M. J., vol. 85, p. 1089. 5½ columns. I.

THE JIG AS A HINDERED SETTLING APPARATUS. J. C. M. I., vol. 13, p. 520. 26 pages. I.

See also CLASSIFIERS AND CLASSIFICATION.

EXPERIMENTAL STUDIES ON THE WORK OF WATER JIGS. By N. V. Hansell. E. & M. J., vol. 85, p. 641. 5 columns. I.

HYDRAULIC JIGS AS USED IN SARDINIA. T. A. I. M. E., vol. 39, p. 81. 3½ pages. I.

COAL WASHING JIGS. P. E. Soc. W. Pa., vol. 23, p. 202. 19 pages. I.

See also PREPARATION OF COAL AND WASHING COAL AND MINERAL.

PULSATORS IN DIAMOND TREATMENT: Jigs. P. C. M. & M. Soc. S. A., vol. 7, p. 229. 1½ columns.

THE CLASSIFYING JIG IN USE AT THE BUNKER HILL MILL. Min. Mag., London, vol. 2, p. 367. 2½ columns. I.

THE HANCOCK JIG IN LEAD CONCENTRATION. Min. & Sci. Press, vol. 101, p. 806. 2 columns. I.

THE TAYLOR VIBRATOR FOR ORE JIGS. T. I. M. & M., vol. 18, p. 2. 23 pages. I.

THE HAZELTON PLUNGER JIG. M. & M., vol. 31, p. 621. 2 columns. I.

JIGS EMPLOYED AT THE CŒUR D'ALENE MILLS. E. & M. J., vol. 89, p. 375. 7½ columns. I.

BULL JIG ROUGHER IN A JOPLIN ZINC MILL. By L. L. Wittich. E. & M. J., vol. 89, p. 1214. 1 column. I.

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CONSTRUCTION AND OPERATION OF HAND JIGS. E. & M. J., vol. 89, p. 1265. 2½ columns. I.

HAND JIGS USED IN SOUTH AFRICAN TIN FIELDS. E. & M. J., vol. 89, p. 471. ½ column. I.

CONSTRUCTION OF HAND JIGS. Min. & Sci. Press, vol. 95, p. 557. 1 column. I.

JIGGING BY HAND. By A. C. Nahl. Min. & Sci. Press, vol. 95, p. 557. 2½ columns. I.

THE HAND JIG IN PRACTICE. By C. N. Nelson. E. & M. J., vol. 87, p. 910. 2 columns. I.

HAND JIGS FOR SMALL MINES. By J. M. Calderwood. M. & M., vol. 31, p. 591. 1½ columns. I.

RICHARDS PULSATOR JIGS AND CLASSIFIERS. E. & M. J., vol. 86, p. 621. 7½ columns. I.

See also CLASSIFIERS AND CLASSIFICATION.

THE RICHARDS PULSATOR JIG. By R. L. Herrick. M. & M., vol. 29, p. 122. 4 columns. I.

THE PULSATING PLUNGER JIG. T. I. M. & M., vol. 18, p. 2. 23 pages. I.

THE SEPARATION OF METALLIC ORES BY JIGGING. By A. Taylor. T. I. M. & M., vol. 18, p. 2. 23 pages. I.

INVESTIGATION ON JIGGING. By R. P. Jarvis. T. A. I. M. E., vol. 39, p. 451. 70 pages. D.

WOODEN JIG GRATES IN THE JOPLIN DISTRICT. By O. Ruhl and F. Sansom. E. & M. J., vol. 88, p. 1025. 3½ columns. I.

A NEW JIG GRATE. E. & M. J., vol. 89, p. 451. 3 columns. I.

DEVICE TO REDUCE TOP WATER ON JIGS. By J. L. Bruce. E. & M. J., vol. 90, p. 399. 1 column. I.

Hand Dressing, Sorting

HAND-PICKING ORES IN SARDINIA. T. A. I. M. E., vol. 39, p. 79. ½ page.

SORTING ORE BY HAND. By L. D. Huntton. E. & M. J., vol. 88, p. 964. 3½ columns.

HAND SORTING OF ORE. E. & M. J., vol. 89, p. 5. ½ column.

SORTING TURQUOISE IN NEW MEXICO. E. & M. J., vol. 86, p. 845. 1½ columns.

ORE SORTING IN MEXICO. E. & M. J., vol. 85, p. 704. 1 column.

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SORTING ORE AT THE NEW KLEINFONTEIN MILL, TRANSVAAL, SOUTH AFRICA. By E. J. Way. E. & M. J., vol. 85, p. 957. 1½ columns.

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ORE SORTING IN THE PACHUCA AND REAL DEL MONTE. E. & M. J., vol. 86, p. 525. 1½ columns.

ORE SORTING ON THE RAND. T. A. I. M. E., col. 5, p. 63. 6 pages.

SORTING TABLE AT COBALT. By G. C. BATEMAN. E. & M. J., vol. 89, p. 1310. 1½ columns. I.

MAGNET FOR REMOVING STEEL FROM ORE. E. & M. J., vol. 88, p. 1238. 1 column. I.

See also COST OF SORTING.

Flotation Processes

THE HISTORY OF THE FLOTATION PROCESS. Min. Mag., London, Vol. 1, p. 61. 8 columns. I.

FLOTATION PATENTS. Min. Mag., London, vol. 1, p. 289. 2½ columns.

THE PHYSICS OF ORE FLOTATION. P. C. M. & M. Soc. S. A., vol. 6, p. 253. 1 column.

See also THEORY OF CONCENTRATION.

A FEW NOTES ON THE ELMORE VACUUM PROCESS OF ORE CONCENTRATION. By H. H. Claudet. J. C. M. I., vol. 11, p. 460. 2 pages.

THE ELMORE FLOTATION PROCESS. E. & M. J., vol. 86, p. 840. 4 columns.

ELMORE PROCESS AS APPLIED BY ZINC CORPORATION. E. & M. J., vol. 88, p. 205. 7 columns. I.

ELMORE VACUUM PLANT. Min. & Sci. Press, vol. 98, p. 391. 2½ columns. I. Flow-sheet.

NOTES ON VARIOUS APPLICATIONS OF THE ELMORE VACUUM PROCESS. By A. S. Elmore. E. & M. J., vol. 87, p. 1275. 5½ columns.

OIL FLOTATION PROCESS AT BROKEN HILL, NEW SOUTH WALES. By T. J. Hoover. E. & M. J., vol. 89, p. 913. 11 columns. I.

METHOD OF DRYING OIL CONCENTRATES. By R. Storen. E. & M. J., vol. 85, p. 1151. ½ column. I.

VACUUM-CONCENTRATION AT SULITELMA, NORWAY. By H. Holmsen and H. N. Rees. Min. Mag., London, vol. 2, p. 377. 6 columns. I.

MACQUISTEN PROCESS OF FLOTATION. P. C. M. & M. Soc. S. A., vol. 9, p. 411. ½ column.

THE IMPROVED MACQUISTEN TUBE:
Flotation Process. By W. R. Ingalls. E. & M. J., vol. 86, p. 23. $\frac{1}{2}$ column. I.

THE MACQUISTEN CONCENTRATING PROCESS. E. & M. J., vol. 89, p. 659. 1 column. I.

THE DEVELOPMENT OF THE DELPRAT AND POTTER FLOTATION PROCESS. By W. R. Ingalls. E. & M. J., vol. 86, p. 175. 2 columns.

ORE DRESSING BY ADHESION OF LIQUID FILMS. By R. Stören. E. & M. J., vol. 86, p. 839. $9\frac{1}{2}$ columns.

HORWOOD PROCESS FOR SEPARATING ZINC SULPHIDES: Flotation. By D. Clark. E. & M. J., vol. 89, p. 460. $4\frac{1}{2}$ columns. I.

THE SANDERS FLOTATION PROCESS. E. & M. J., vol. 87, p. 844. $\frac{1}{2}$ column. I.

THE MUREX MAGNETIC PROCESS: An Adjunct to the Flotation Process. Min. Mag., London, vol. 1, p. 142. 4 columns.

See also **MAGNETIC CONCENTRATION** and **COST OF MILLING.**

Amalgamation of Gold and Silver

AMALGAMATION OF SILVER AND GOLD. Min. Mag., vol. 10, p. 288. $5\frac{1}{2}$ pages.

AMALGAMATION METHODS. By H. W. MacFarren. Min. & Sci. Press, vol. 97, p. 814. $5\frac{1}{2}$ columns.

IMPROVEMENTS IN AMALGAMATION. Min. & Sci. Press, vol. 22, p. 344. $1\frac{1}{2}$ columns.

THE ECONOMICS OF AMALGAMATION. By J. H. Haynes. M. & M., vol. 29, p. 321. $2\frac{1}{2}$ columns.

THE EFFECT ON AMALGAMATION, OF DIFFERENT INTERVALS OF TIME BETWEEN THE DRESSINGS OF PLATES. By G. O. Smart. P. C. M. & M. Soc. S. A., vol. 9, p. 425. 10 columns.

ELECTRO-CHEMICAL AMALGAMATION. By D. F. McGrow. Min. & Sci. Press, vol. 98, p. 897. $1\frac{1}{2}$ columns.

ELECTRO-CHEMICAL AMALGAMATION. P. C. M. & M. Soc. S. A., vol. 10, p. 26. 3 columns.

METHODS OF ELECTROCHEMICAL AMALGAMATION. By E. E. Carey. Min. & Sci. Press, vol. 100, p. 394. 2 columns.

USES AND LIMITATIONS OF ELECTROLYTIC AMALGAMATION. By J. H. Jory. Min. & Sci. Press, vol. 99, p. 476. $1\frac{1}{2}$ columns. I.

AMALGAMATION FOLLOWING FINE GRINDING. By C. F. Spaulding. Min. & Sci. Press, vol. 101, p. 872. $4\frac{1}{2}$ columns. I.

PEBBLE-MILL AMALGAMATION. By W. H. Hardinger. Min. & Sci. Press, vol. 100, p. 608. $1\frac{1}{2}$ columns. I.

See also **FINE CRUSHING BY MILLS.**

THE WASHOE PROCESS. By A. D. Hodges, Jr. Min. & Sci. Press, vol. 100, p. 757. 3 columns.

CLEANING MERCURY. Min. & Sci. Press, vol. 96, p. 695. $\frac{1}{2}$ column.

NOTES ON MILL CONSTRUCTION, MILLING AND AMALGAMATION. By I. Roskelley. P. C. M. & M. Soc. S. A., vol. 5, p. 9, 9 columns, I.; p. 49, 9 columns.

See also **MINE BUILDINGS, ETC.,** and **COST OF MILLING.**

Flow-Sheets

FLOW-SHEET OF REPORTS. E. & M. J., vol. 89, p. 1217. $\frac{1}{2}$ column. D.

FLOW-SHEET OF ASBESTOS TREATMENT IN QUEBEC. J. C. M. I., vol. 13, p. 413. I.

See also **OCCURRENCE OF ASBESTOS.**

FLOW-SHEET OF THE BEAVER BROOK BREAKER. M. & M., vol. 30, p. 707. D.

See also **PREPARATION OF COAL.**

REVISED FLOW-SHEET OF UTAH COPPER MILL. By C. T. Rice. E. & M. J., vol. 90, p. 1264. 3 columns. I.

FLOW-SHEET OF THE OHIO CONCENTRATOR. Min. & Sci. Press, vol. 101, p. 303. Diagram.

- FLOW-SHEET OF THE MIAMI MILL, ARIZONA.** M. & M., vol. 31, p. 2. I.
- FLOW-SHEET OF THE MT. MORGAN, MINE.** M. & M., vol. 29, p. 4. I.
- FLOW-SHEET OF ELECTROSTATIC SEPARATION.** M. & M., vol. 30, p. 364. D.
- See also **ELECTRO-STATIC SEPARATION.**
- FLOW-SHEETS OF THE LORETO AND QUERÉTARO MILLS, MEXICO.** Min. Mag., London, vol. 2, pp. 130 and 131. D.
- FLOW-SHEET OF THE JESUS MARIA MILL, GUANAJUATO.** E. & M. J., vol. 86, p. 616. I.
- FLOW-SHEETS FOR COBALT MILLS.** E. & M. J., vol. 90, pp. 1254, 1255, 1256, and 1257. D.
- FLOW-SHEET AT THE AJUCHITLAN MILL, QUERÉTARO, MEXICO.** Min. & Sci. Press., vol. 100, p. 214. 1 column. I.
- FLOW-SHEET OF THE FLORENCE-GOLD-FIELD MILL.** E. & M. J., vol. 89, p. 366. I.
- FLOW-SHEETS OF ORE TREATMENT AT KALGURLI, AUSTRALIA.** Min. & Sci. Press, vol. 101, p. 402. D.
- FLOW-SHEET OF THE MONTGOMERY-SHOSHONE MILL.** E. & M. J., vol. 89, p. 218. I.
- FLOW-SHEET OF THE CONQUEROR TAILINGS PLANT.** E. & M. J., vol. 89, p. 668. I.
- FLOW-SHEET OF THE MIDVALE PLANT.** M. & M., vol. 30, p. 518. D.
- FLOW-SHEETS OF HERCULES AND FEDERAL'S MAMMOTH MILL.** E. & M. J., vol. 88, pp. 1105, 1106. D.
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- FLOW-SHEETS OF AMERICAN AND MEXICAN MILLS.** E. & M. J., vol. 88, p. 864, 12 columns, I.; p. 966, 8 columns. D.
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- NOTES ON THE SCALING AND SWEATING OF COPPER BATTERY PLATES.** By S. F. Goddard. T. I. M. & M., vol. 18, p. 495. 4 pages.
- THE SILVER COATING OF AMALGAMATING PLATES.** P. C. M. & M. Soc. S. A., vol. 9, p. 142. 2 columns. I.
- THE SILVER COATING OF AMALGAMATING PLATES.** P. C. M. & M. Soc. S. A., vol. 9, p. 222. $\frac{1}{2}$ column.
- SILVER COATING OF AMALGAMATING PLATES.** By W. A. Caldecott. Min. & Sci. Press, vol. 98, p. 92. $1\frac{1}{2}$ columns.
- COPPER PLATE ABSORPTION.** P. C. M. & M., Soc. S. A., vol. 9, p. 214. $1\frac{1}{2}$ columns.
- THE USE OF ELECTRO-PLATED COPPER PLATES IN THE BATTERY.** By F. W. Cindel. P. C. M. & M. Soc. S. A., vol. 5, p. 92, 6 columns; p. 175, 3 columns; p. 205, $1\frac{1}{2}$ columns; p. 316, $\frac{1}{2}$ column.
- DRESSING PLATES AS AFFECTING AMALGAMATION.** E. & M. J., vol. 88, p. 556. $2\frac{1}{2}$ columns.
- MONEL METAL.** E. & M. J., vol. 86, p. 1256. $\frac{1}{2}$ column.
- SCALING AND SWEATING OF COPPER BATTERY PLATES.** By S. F. Goddard. Min. & Sci. Press, vol. 99, p. 368. 1 column.
- THE AVERAGE RATE OF ACCUMULATION AND ABSORPTION OF GOLD AMALGAM BY COPPER PLATES.** By E. Halse. T. I. M. & M., vol. 17, p. 486. 12 pages.
- ABSORPTION OF GOLD AMALGAM BY COPPER PLATES.** E. & M. J., vol. 86, p. 996. $1\frac{1}{2}$ columns.
- THE ABSORPTION AND ACCUMULATION OF GOLD ON COPPER PLATES.** By W. F. A. Thomas. T. I. M. & M., vol. 17, p. 482. $3\frac{1}{2}$ pages.

Pan Amalgamation

A NEW AMALGAMATING PAN. Min. & Sci. Press, vol. 20, p. 209. 3 columns. I.

PAN - AMALGAMATION EXPERIMENTS. By H. O. Hofman and C. R. Hayward. Min. & Sci. Press, vol. 99, p. 529. 9½ columns. I.

PAN - AMALGAMATION: An Instructive Laboratory Experiment. By H. O. Hofman and C. R. Hayward. T. A. I. M. E., vol. 40, p. 382. 16 pages. I.; Discussion, p. 864. 10 pages. I.

Amalgamating Apparatus (Amalgamators)

THE PIERCE AMALGAMATOR. E. & M. J., vol. 85, p. 112. 1 column. I.

THE PIERCE AMALGAMATOR. By J. H. Haynes. M. & M., vol. 29, p. 524. 3 columns. I.

AMALGAMATOR AT THE RUBY MILL, WARD, COLORADO. Min. & Sci. Press, vol. 101, p. 875. 2 columns. I.

A TAIL-BOX FOR AMALGAMATION: Amalgam Trap. By H. S. Reed, Jr. E. & M. J., vol. 89, p. 599. 2 columns. I.

The Patio Process of Amalgamation

THE PATIO PROCESS. By C. P. Duarte. P. C. M. & M. Soc. S. A., vol. 9, p. 105. 9½ columns.

THE PATIO PROCESS. By F. MacCoy. E. & M. J., vol. 90, p. 958. 2½ columns. I.

THE PATIO PROCESS AT THE GUADALUPE HACIENDA, PACHUCA, MEXICO. E. & M. J., vol. 86, p. 559. 5 columns. I.

THE PATIO PROCESS AT GUANAJUATO, MEXICO. E. & M. J., vol. 89, p. 961. 1 column.

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Electrostatic Separation

ELECTROSTATIC SEPARATION. By H. A. Wentworth. Min. & Sci. Press, vol. 101, p. 567. 2½ columns.

THE BLAKE-MORSCHER ELECTROSTATIC SEPARATOR. M. & M., vol. 30, p. 363. 2 columns. I.

ELECTROSTATIC SEPARATION OF MINERALS IN ORES. By H. A. Wentworth. E. & M. J., vol. 90, p. 15. 8½ columns. I.

ELECTROSTATIC ZINC SEPARATION. By L. A. Palmer. M. & M., vol. 30, p. 362. 9 columns. I.

ELECTROLYTIC SEPARATION OF NICKEL AND COPPER. P. C. M. & M. Soc. S. A., vol. 9, p. 53. ½ column.

See also COST OF MILLING.

Magnetic Separation

ELECTRO MAGNETIC SEPARATION. By J. N. Judson. E. & M. J., vol. 88, p. 270. 3½ columns.

ELECTRICITY AS A FACTOR IN ORE DRESSING: Magnetic Concentration. By W. B. Roberts. T. A. I. M. E., vol. 1, p. 131. 4 pages. I.

AN ELECTROMAGNET FOR TESTING THE SUITABILITY OF AN ORE FOR MAGNETIC SEPARATION. By L. H. L. Huddart. E. & M. J., vol. 85, p. 1008. 1½ columns. I.

AN ELECTRO-MAGNET FOR TESTING THE SUITABILITY OF AN ORE FOR MAGNETIC SEPARATION. By L. H. L. Huddart. T. I. M. & M., vol. 17, p. 435. 5 pages. I.

THE MAGNETIC PROPERTIES OF IRON AND STEEL AT LIQUID AIR TEMPERATURES. By C. C. Trowbridge. Sch. Mines Quart., vol. 24, p. 72. 12 columns. I.

THE MUREX MAGNETIC PROCESS: Magnetism Applied to Flotation. Min. Mag., London, vol. 1, p. 142. 4 columns.

THE MUREX MAGNETIC CONCENTRATION PROCESS. E. & M. J., vol. 88, p. 371. 1½ columns.

MUREX MAGNETIC CONCENTRATION PROCESS. Min. & Sci. Press, vol. 98, p. 757. 1 column.

See also FLOTATION PROCESSES.

THE FERRARIS MAGNETIC SEPARATOR: A New Form. Min. Mag., London, vol. 2, p. 227. $\frac{1}{2}$ column. I.

THE GRÖNDAL PROCESS OF CONCENTRATING IRON ORES. By P. McN. Bennie. J. C. M. I., vol. 11, p. 189. 14 pages. I. Maps.

MAGNETIC CONCENTRATION OF IRON ORES BY THE GRÖNDAL PROCESS. By P. McN. Bennie. J. C. M. I., vol. 10, p. 261. 12 $\frac{1}{2}$ pages. D.

MAGNETIC SEPARATION OF ZINC ORES IN THE SANTA BARBARA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 211. 1 $\frac{1}{2}$ columns.

MAGNETIC SEPARATION OF WOLFRAMITE. M. & M., vol. 31, p. 462. 1 column. I.

MAGNET USED IN THE SEPARATION OF TIN-OXIDE FROM WOLFRAM. T. I. M. & M., vol. 17, p. 157. Note. I.

THE SEPARATION OF TIN-OXIDE FROM WOLFRAM. By A. Treloar. T. I. M. & M., vol. 17, p. 137. 22 pages. I.

MAGNETIC SEPARATION OF MONAZITE IN THE CAROLINAS. T. A. I. M. E., vol. 40, p. 332. 6 pages. I.

MAGNETIC SEPARATION IN SARDINIA. T. A. I. M. E., vol. 39, p. 91. 3 pages.

MAGNETIC SEPARATION AT MONTEPONI. Min. Mag., London, vol. 2, p. 227. $\frac{1}{2}$ column. I.

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Concentrators, Tables, Buddles, Etc.

THEORY OF THE ACTION OF THE WILFLEY TABLE. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

THE WILFLEY TABLE, I. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

THE WILFLEY TABLE, II. By R. H. Richards. T. A. I. M. E., vol. 39, p. 303. 11 pages. I.

USE OF WILFLEY TABLES IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 822. 3 columns.

CONCENTRATION OF FINE SANDS ON A BELT VANNER. By T. M. Owen and J. F. Stephen. T. A. I. M. E., vol. 13, p. 143. 10 $\frac{1}{2}$ pages.

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TREATMENT OF SLIMES ON VANNERS. By R. Gahl. T. A. I. M. E., vol. 40, p. 517. 21 $\frac{1}{2}$ pages. I.

See also SLIMES AND THEIR TREATMENT.

A SUSPENDED FRAME FRUE VANNER. By G. B. Shipley. E. & M. J., vol. 85, p. 415. 1 column. I.

VANNERS IN THE BUNKER HILL MILL. Min. Mag., London, vol. 3, p. 54. 1 $\frac{1}{2}$ columns. I.

VANNERS IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 823. 1 column.

LA POINT FLOUR-GOLD SEPARATOR. E. & M. J., vol. 85, p. 1141. $\frac{1}{2}$ column. I.

GOLD SAVING TABLES ON CALIFORNIA DREDGES. E. & M. J., vol. 89, p. 1311. 2 columns. I.

See also DREDGING FOR GOLD AND OTHER MATERIALS.

THE HENNING CONCENTRATING TABLE. E. & M. J., vol. 86, p. 134. 1 column. I.

THE TAYLOR CONCENTRATING TABLE. Min. & Sci. Press, vol. 95, p. 692. 1 $\frac{1}{2}$ columns. I.

THE GOLDEN CYCLE CONCENTRATOR. M. & M., vol. 30, p. 673. 2 columns.

RITTINGER'S PERCUSSION TABLE. Min. & Sci. Press, vol. 20, p. 130. 1 column. I.

OSCILLATING-TABLES FOR ORE TREATMENT IN SARDINIA. T. A. I. M. E., vol. 39, p. 83. 6 pages. I.

- RECIPROCATING TABLES IN THE BUNKER HILL MILL.** Min. Mag., London, vol. 3, p. 50. 6 columns.
- THE GREASE TABLE FOR COLLECTING DIAMONDS.** E. & M. J., vol. 89, p. 371. $\frac{1}{2}$ column.
- CONSTRUCTION OF CANVAS TABLES FOR CANVAS SLIME PLANT.** E. & M. J., vol. 89, p. 356. 2 columns. I.
- AN IMPROVED BLANKET TABLE.** By T. White. T. Au. I. M. E., vol. 4, p. 36. 6 pages. I.
- BUDDLES FOR COARSE AND FINE ORE IN THE TIN WORKS OF YUNNAN DISTRICT, CHINA.** T. I. M. & M., vol. 19, p. 191. 1 page. I.
- THE BUDDLE AS A CONCENTRATOR OF COPPER SLIMES.** By C. T. Rice. E. & M. J., vol. 90, p. 1107. 5 columns. I.
- THE MEXICAN PLANILLAS.** E. & M. J., vol. 90, p. 353. 1 column. I.
- MEXICAN "PLANILLA" CONCENTRATOR.** By H. J. Baron. M. & M., vol. 30, p. 377. 3 columns. I.
- ORE CONCENTRATOR.** Min. & Sci. Press, vol. 22, p. 161. 1 column. I.
- CENTRIFUGAL DRY CONCENTRATOR.** Min. & Sci. Press, vol. 97, p. 608. 1 column.
- Washing Coal and Mineral**
- PROCESS OF COAL WASHING.** By S. Diescher. P. E. Soc. W. Pa., vol. 23, p. 199. 22 pages. I.
- DESCRIPTION OF WASHING (COAL) PLANTS IN OPERATION.** By W. G. Wilkins. P. E. Soc. W. Pa., vol. 23, p. 221. 20 pages. I.
- THE BITUMINOUS WASHERY AT TYLER, PENNSYLVANIA.** By E. K. Judd. E. & M. J., vol. 85, p. 457. 8 columns. I.
- THE OPERATION OF A COAL WASHERY IN COLORADO.** By W. F. Murray. E. & M. J., vol. 86, p. 1248. 9 columns. I.
- A MODERN COAL WASHERY IN NEW MEXICO.** E. & M. J., vol. 86, p. 182. $6\frac{1}{2}$ columns.
- WASHING AND COKING TESTS OF COAL AT DENVER, COLORADO.** By A. W. Belden and others. U. S. G. S., Bull. 368. 54 pages. I. 1909.
- See also **TESTING FUELS AND THEIR VALUE.**
- DAWSON COAL WASHING PLANT, NEW MEXICO.** M. & M., vol. 29, p. 91. 2 columns. I.
- A NEW COAL WASHERY IN MICHIGAN.** By Lee Fraser. E. & M. J., vol. 87, p. 993. $3\frac{1}{2}$ columns. I.
- COAL WASHING IN THE GREAT FALLS COALFIELD, MONTANA.** E. & M. J., vol. 87, p. 590. 1 column.
- THE COAL-WASHING PLANT AT THE DAWSON MINE, NEW MEXICO.** M. & M., vol. 31, p. 656. $2\frac{1}{2}$ columns. I.
- ELECTRIC COAL WASHING IN SOUTH WALES.** P. C. M. & M. Soc. S. A., vol. 9, p. 281. 1 column.
- ERNEST COAL-WASHING PLANT.** M. & M., vol. 29, p. 251. 3 columns. I.
- SCAIFE AUTOMATIC TROUGH WASHER FOR COAL AND ORE.** M. & M., vol. 29, p. 328. $\frac{1}{2}$ column. I.
- See also **PREPARATION OF COAL.**
- THE LOG WASHER IN ZINC MINING.** By L. L. Wittich. M. & M., vol. 31, p. 423. 1 column. I.
- LOG WASHERS USED IN MINNESOTA FOR WASHING IRON ORE.** M. & M., vol. 29, p. 97. $3\frac{1}{2}$ columns. I.
- LOG WASHER FOR GOLD ORES.** E. & M. J., vol. 87, p. 936. 2 columns. I.
- ORE WASHING AT CRIPPLE CREEK.** By S. A. Worcester. Min. & Sci. Press, vol. 98, p. 291. $3\frac{1}{2}$ columns.
- NEW TYPE OF WASHER FOR LOW-GRADE GOLD ORES.** By J. H. Pratt. E. & M. J., vol. 87, p. 935. 10 columns. I.
- NEW PLANT FOR WASHING IRON ORE, MESABI RANGE.** By E. K. Soper. E. & M. J., vol. 90, p. 712. $5\frac{1}{2}$ columns. I.
- WASHING FLOORS FOR TIN CONCENTRATION, YUNNAN, CHINA.** T. I. M. & M., vol. 19, p. 191. 1 page. I.

SOMETHING NEW IN ORE WASHING:
A Washer. Min. & Sci. Press, vol. 22, p. 392. $\frac{1}{2}$ column.

BARITE WASHING. T. A. I. M. E., vol. 40, p. 739. 2 pages. I.

THE ROTARY PAN METHOD OF WASHING TIN ORE. P. C. M. & M., Soc. S. A., vol. 8, p. 175. 2 columns.

DIAMOND-WASHING. Min. Mag., London, vol. 3, p. 439. 2 columns. I.

See also **COST OF WASHING COAL AND ORES.**

Disposal of Waste

THE DISPOSAL OF RESIDUES AT KALGOORLIE. By H. Adams. T. A. I. M. E., vol. 13, p. 115. $13\frac{1}{2}$ pages. I.

THE JACKSON METHOD OF TAILINGS DISPOSAL. E. & M. J., vol. 85, p. 643. 3 columns. I.

DISPOSAL OF SLIMES AND TAILINGS AT STELLA MINE, NEW YORK. E. & M. J., vol. 88, p. 556. $1\frac{1}{2}$ columns. I.

TAILING DISPOSAL PLANT AT THE WOLVERINE MILL. By C. K. Baldwin. E. & M. J., vol. 88, p. 71. 8 columns. I.

TAILING DISPOSAL AT MERCUR, UTAH. By H. W. MacFarrren. Min. & Sci. Press, vol. 97, p. 125. $1\frac{1}{2}$ columns. I.

CONVEYING TAILING THROUGH PIPE. Min. & Sci. Press, vol. 95, p. 78. $1\frac{1}{2}$ columns.

See also **PIPES, ETC.**

CONVEYING TAILING IN LAUNDERS. By C. W. Van Law. Min. & Sci. Press, vol. 95, p. 457. 1 column.

See also **LAUNDERS AND DISTRIBUTORS.**

CONVEYOR SYSTEM FOR DISPOSING OF WASTE. By E. Higgins. E. & M. J., vol. 87, p. 210. 3 columns. I.

See also **CONVEYORS FOR MINERAL AND COAL.**

DUMPING RESIDUE AT KALGOORLIE. By M. W. Von Bernewitz. Min. & Sci. Press, vol. 95, p. 368. $4\frac{1}{2}$ columns, I.; p. 459, 2 columns, I.

HANDLING TAILINGS AT COLORADO CITY. By R. L. Herrick. M. & M., vol. 30, p. 621. $5\frac{1}{2}$ columns. I.

METHOD OF HANDLING SLIMES AND TAILINGS. By A. O. Ihlseng. E. & M. J., vol. 89, p. 762. $2\frac{1}{2}$ columns. I.

IMPOUNDING MILL TAILING. By H. W. MacFarrren. Min. & Sci. Press, vol. 99, p. 333. 2 columns. I.

THE CALUMET AND HECLA SAND WHEELS. By C. L. Fichtel. E. & M. J., vol. 90, p. 218. $3\frac{1}{2}$ columns. I.

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CLASSIFICATION OF SLIMES. T. I. M. & M., vol. 19, p. 409. 3 pages.

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CLASSIFICATION BY CURRENT OF WATER: Treatment of Ores in Sardinia. T. A. I. M. E., vol. 39, p. 77. $2\frac{1}{2}$ pages. I.

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SPITZLUTTEN. By H. Leupold. P. C. M. & M. Soc. S. A., vol. 5, p. 239. $3\frac{1}{2}$ columns. I.

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- THE WILSON HYDRAULIC SEPARATOR.** P. C. M. & M. Soc. S. A., vol. 8, p. 176. 2 columns. I.
- THE MERRILL CLASSIFIER.** E. & M. J., vol. 87, p. 808. $\frac{1}{2}$ column. I.
- THE BLANC TURBO-CLASSIFIER.** E. & M. J., vol. 87, p. 500. $2\frac{1}{2}$ columns. I.
- THE CHAPMAN CLASSIFIER.** E. & M. J., vol. 89, p. 917. I.
- PIPE CLASSIFIER:** Used at the Bunker Hill and Sullivan Mill. Min. & Sci. Press, vol. 100, p. 121. 2 columns. I.
- THE DORR CLASSIFIERS:** Used at the Pachuca Mills. E. & M. J., vol. 86, p. 650. $1\frac{1}{2}$ columns.
- THE SOUCHON CLASSIFIER.** E. & M. J., vol. 85, p. 1009. $1\frac{1}{2}$ columns. I.
- DIAPHRAGM CONES AND TUBE-MILLING.** By W. Neal. Min. & Sci. Press, vol. 100, p. 483. 7 columns. I.
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- SLIME TREATMENT.** By A. M. Nicholas. Min. & Sci. Press, vol. 95, p. 583. 1 column. I.
- SLIME TREATMENT.** Min. & Sci. Press, vol. 95, p. 715. 3 columns. I.
- TREATMENT OF ORE SLIME.** By A. F. Crosse. P. C. M. & M. Soc. S. A., vol. 10, p. 172. 4 columns. I.
- TREATMENT OF SLIME.** P. C. M. & M. Soc. S. A., vol. 10, p. 408. 5 columns. D.
- TREATMENT OF SLIMES.** By W. B. Gray. T. A. I. M. E., vol. 5, p. 138. $4\frac{1}{2}$ pages.
- TREATMENT OF SLIME.** By H. C. Nichols. Min. Mag., London, vol. 1, p. 221. $6\frac{3}{4}$ columns. I.
- CONCENTRATION OF SLIME.** By W. E. Darrow. Min. & Sci. Press, vol. 95, p. 268. 2 columns.
- SLIME CONCENTRATION.** By F. R. Porter. Min. & Sci. Press, vol. 100, p. 431. $2\frac{1}{2}$ columns.
- CONCENTRATION OF SLIME.** By M. W. Von Bernewitz. Min. & Sci. Press, vol. 101, p. 777. $2\frac{1}{2}$ columns. I.
- CONCENTRATION OF SLIME.** By E. A. Sperry. Min. & Sci. Press, vol. 101, p. 174, 5 columns; p. 206, $10\frac{1}{2}$ columns, I.; p. 432, 6 columns, I.
- THE ELEMENTS OF SLIME CONCENTRATION.** E. & M. J., vol. 89, p. 1105. 4 columns.
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SLIME TREATMENT AT THE MONTGOMERY-SHOSHONE MILL. E. & M. J., vol. 89, p. 219. $1\frac{1}{2}$ columns.

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SLIME TREATMENT AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 496. 3 columns. I.

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SLIME TREATMENT AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89, p. 568. $1\frac{1}{2}$ columns.

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RECLAIMING ZINC-LEAD FINES. By L. L. Wittich. M. & M., vol. 31, p. 131. 1 column. I.

SLIMES TREATMENT OF TIN ORE IN THE CAPE COLONY MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 177. $1\frac{1}{2}$ columns. I.

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By W. J. Sharwood. Min. Mag., London, vol. 1, p. 226, 8 columns, I.; p. 297, 16 columns, D.

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Sand Treatment

SAND TREATMENT. Min. & Sci. Press, vol. 98, p. 316. $1\frac{1}{2}$ columns.

TREATMENT OF SANDS AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89, p. 567. 2 columns.

SAND TREATMENT AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1276. $1\frac{1}{2}$ columns.

TREATMENT OF SANDS AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 570. 2 columns.

See also CLASSIFIERS AND CLASSIFICATION and SLIMES AND THEIR TREATMENT.

See also CYANIDING GOLD, ETC.

Dry Concentration

THE HUNGARIAN DRY WASHER FOR TREATING DRY PLACERS. Min. & Sci. Press, vol. 97, p. 360. 1 column. I.

DRY-PLACER MACHINES. By G. M. Peterson. Min. & Sci. Press, vol. 101, p. 639. $1\frac{1}{2}$ columns.

DRY-WASHING FOR PLACER-GOLD IN SONORA, MEXICO. By J. V. Richards. T. A. I. M. E., vol. 41, p. 797. 6 pages. I.

DRY PLACER MINING MACHINES. By E. B. Wilson. M. & M., vol. 31, p. 589. $4\frac{1}{2}$ columns. I.

See also AURIFEROUS GRAVELS, PROSPECTING, and HYDRAULIC MINING.

DRY-GOLD WASHERS. M. & M., vol. 31, p. 229. 3 columns. I.

THE BEHREND DRY CONCENTRATOR. E. & M. J., vol. 85, p. 1294. 2 columns. I.

See also CONCENTRATORS, TABLES, ETC.

Salt Making

SALT: Its History, Occurrence and Manufacture. By A. A. Hayard. J. M. Soc. N. S., vol. 11, p. 99. 18 pages.

SALT: Historically, Statistically, and Economically; New Improved American Salt Manufacture. By R. Thomassy. Min. Mag., vol. 9, p. 438. 3½ pages.

HISTORY OF SALT MAKING. By E. W. Parker. U. S. G. S., 18th Ann. Rept., pt. 5. 24 pages. 1896-97.

SALT MAKING AT ALAMEDA, CALIFORNIA. Min. & Sci. Press, vol. 22, p. 70. ½ column.

PURIFYING ROCK SALT BY FUSION. E. & M. J., vol. 86, p. 564. ½ column.

SALT-MAKING PROCESSES IN THE UNITED STATES. By T. M. Chatard. U. S. G. S., 7th Ann. Rept., pp. 491-535. 1885-86. I.

SALT PRODUCTION WITH EXHAUST STEAM. By N. B. Beasley. E. & M. J., vol. 87, p. 1150. 1½ columns.

NOTES ON THE EVAPORATED SALT INDUSTRY OF KANSAS. By C. M. Young. E. & M. J., vol. 88, p. 558. 10½ columns. I.

THE ROCK SALT MINING INDUSTRY IN KANSAS. By S. Ainsworth. E. & M. J., vol. 88, p. 454. 7½ columns. I.

See also **METHODS OF MINING, and MINING THICK AND MASSIVE DEPOSITS, also COST OF MILLING.**

Practice in Milling Ores

ORE DRESSING IN THE UNITED STATES AND MEXICO. By H. A. Guess. E. & M. J., vol. 88, p. 864, 12 columns, D.; p. 966, 11 columns, I., D.

PROGRESS AND PROBLEMS IN ORE DRESSING. By C. De Kalb. Min. & Sci. Press, vol. 100, p. 54. 7 columns. I.

DESIGNING A THOUSAND-TON CONCENTRATING PLANT. By C. C. Christensen. Min. & Sci. Press, vol. 101, p. 806. 4½ columns. I.

THE CONQUEROR TAILINGS PLANT. E. & M. J., vol. 89, p. 668. 2 columns. I.

See also **DISPOSAL OF WASTE.**

THE MECHANICAL PREPARATION OF ORES IN SARDINIA. By E. Ferraris. T. A. I. M. E., vol. 39, p. 72. 25½ pages. I.

CONCENTRATING MIXED ORES AT ROSAS, SARDINIA. By U. Coppa. E. & M. J., vol. 85, p. 943. 10 columns. I.

THE SOUTH UTAH MILL. M. & M., vol. 31, p. 592. 8½ columns. I.

CONCENTRATION AT NAGYBANYA, HUNGARY. Min. & Sci. Press, vol. 96, p. 66. 3 columns. I.

MODE OF TREATMENT OF ORES AT THE MINES OF SCHEMNITZ, IN HUNGARY. Min. Mag., vol. 3, p. 260. 3 pages.

MILLING OF ASBESTOS IN QUEBEC. J. C. M. I., vol. 13, p. 411. 3½ pages. Flow-sheet.

See also **OCCURRENCE OF ASBESTOS.**

PREPARATION OF BARITE FOR MARKET, MISSOURI. T. A. I. M. E., vol. 40, p. 734. 9½ pages. I.

See also **OCCURRENCE OF BARITE and REDUCTION OF ORES.**

THE OHIO CONCENTRATOR. By L. A. Palmer. Min. & Sci. Press, vol. 101, p. 301. 7½ columns. I.

MIAMI CONCENTRATING MILL, ARIZONA. By R. L. Herrick. M. & M., vol. 31, p. 1. 5 columns. I.

THE OHIO CONCENTRATOR AT BINGHAM CANYON, UTAH. By L. A. Palmer. M. & M., vol. 29, p. 519. 3½ columns. Flow-sheet.

CONCENTRATION AT CANANEA, MEXICO. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 325. 12½ columns. I.

LAKE SUPERIOR ORE-DRESSING PRACTICE. By L. S. Austin. Min. & Sci. Press, vol. 96, p. 259. 3½ columns. I.

CONCENTRATION AT THE BUTTE REDUCTION WORKS. By A. H. Wetthey. E. & M. J., vol. 88, p. 415. 3½ columns. I.

- EXPERIMENTAL MILL OF THE NEVADA CONSOLIDATED COPPER COMPANY.** By M. L. Requa. *Min. & Sci. Press*, vol. 97, p. 90. 9 columns. Tables.
- DRESSING OF ORES AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.** *T. Au. I. M. E.*, vol. 11, p. 99. 4 pages.
- PREPARATION OF DIAMONDS AT THE DE BEERS MINES.** *P. C. M. & M. Soc. S. A.*, vol. 7, p. 228. 2½ columns.
- PROGRESS IN THE TREATMENT OF GOLD ORE.** By A. James. *Min. & Sci. Press*, vol. 96, p. 41. 3½ columns.
- TREATMENT OF THE BANKET DEPOSITS, SOUTH AFRICA.** *T. Au. I. M. E.*, vol. 3, p. 84. 5 pages. I.
- ANALYSIS OF MINE AND MILL PRACTICE ON THE RAND.** By E. M. Weston. *E. & M. J.*, vol. 89, p. 169, 14 columns, I.; p. 267, 10½ columns, I.
- DESCRIPTION OF ORE TREATMENT AT THE GIANT MINE, HARTLEY DISTRICT, RHODESIA.** By R. C. H. Cooke. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 152. 8½ columns. I.
- THE TREATMENT OF THE GOLD ORES OF HOG MOUNTAIN, ALABAMA.** By T. H. Aldrich. *T. Au. I. M. E.*, vol. 39, p. 578. 6 pages.
- PROGRESS IN ORE TREATMENT AT KALGOORLIE.** By M. W. Von Bernwitz. *Min. & Sci. Press*, vol. 100, p. 926. 5½ columns.
- NOTES ON THE WAIHI ORE TREATMENT.** By R. Stokes. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 10, 8 columns, I.; p. 53, 3 columns; p. 121, 1 column; p. 209, ½ column.
- THE TREATMENT OF THE AURIFEROUS SULPHIDE ORES OF KALGOORLIE.** By F. Moss. *T. Au. I. M. E.*, vol. 8, pt. 1, p. 40. 27 pages.
- MILLING AND TREATMENT OF AURIFEROUS ORES IN NEW ZEALAND.** By H. A. Gordon. *T. Au. I. M. E.*, vol. 9, p. 206. 18 pages.
- THE TREATMENT OF CASSILIS ORE, EAST GIPPSLAND, VICTORIA, AS CARRIED ON BY THE CASSILIS MINING COMPANY, N. L.** By W. Aplin. *T. Au. I. M. E.*, vol. 9, p. 224. 10 pages. I. D.
- TREATMENT OF SULPHIDE ORES IN VICTORIA.** By S. Radcliff and J. Druermann. *Min. & Sci. Press*, vol. 99, p. 367. 3 columns.
- MILLING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Wolcott. *E. & M. J.*, vol. 87, p. 439. 10 columns. I.
- SCHEMES OF CONCENTRATION AT COBALT.** *M. & M.*, vol. 31, p. 303. 9 columns. I.
- CONCENTRATION AT COBALT, ONTARIO.** By G. E. Sancton. *M. & M.*, vol. 29, p. 200. 4½ columns. I.
- METHODS OF CONCENTRATION AT COBALT, ONTARIO.** By G. E. Sancton. *J. C. M. I.*, vol. 11, p. 340. 8 pages.
- HYDROMETALLURGICAL OPERATIONS AT COBALT.** By J. Tyssowski. *E. & M. J.*, vol. 90, p. 1253. 15½ columns. D.
- MILLING IN THE CRIPPLE CREEK DISTRICT, COLORADO.** By S. A. Worcester. *E. & M. J.*, vol. 87, p. 956. 5½ columns.
- See also **WASHING COAL AND MINERAL PRACTICE AT THE CAMP BIRD MILL.** *Min. & Sci. Press*, vol. 97, p. 669. 1½ columns.
- SEPARATION OF MIXED SULPHIDES AT CHARCAS, SAN LUIS POTOSI.** By R. C. Canby. *E. & M. J.*, vol. 85, p. 698. 5 columns.
- SOME FEATURES OF SILVER ORE TREATMENT IN MEXICO.** By W. A. Caldecott. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 203, 6½ columns; p. 266, 7 columns; p. 352, 2 columns; p. 384, 4 columns; vol. 19, p. 10, 7 columns; p. 97, 1½ columns.
- RIO PLATA MINE AND MILL, WESTERN CHIHUAHUA.** By H. J. Baron. *E. & M. J.*, vol. 87, p. 147. 14 columns. I.

- MILLING GOLD AND SILVER ORES AT TAJO ROSARIO, MEXICO. T. A. I. M. E., vol. 41, p. 333. 5 pages. I.
- MILLING AND CYANIDE PRACTICE AT EL ORO, MEXICO. By C. T. Rice. E. & M. J., vol. 87, p. 683. 23 columns. I.
- THE DOS ESTRELLAS MILL. Min. & Sci. Press, vol. 96, p. 197. 3 columns. I.
- MILLING AND CYANIDE PRACTICE, SAN PROSPERO MILL, GUANAJUATO. By J. S. Butler. Min. & Sci. Press, vol. 97, p. 130. 5 columns. D.
- See also CYANIDING ORES.
- METHOD OF CONCENTRATION AT THE GRANADENA MINES, MEXICO. Min. & Sci. Press, vol. 97, p. 397. 3½ columns. Flow-sheet.
- SAN YGNACIO MINE AND MILL, CHIHUAHUA, MEXICO. By O. Perogallo. E. & M. J., vol. 88, p. 1263. 6½ columns. I.
- MILL OF THE MONTEZUMA MINES, COSTA RICA. E. & M. J., vol. 90, p. 715. 6 columns.
- THE SAN RAFAEL MILL AT PACHUCA. By M. R. Lamb. E. & M. J., vol. 86, p. 325. 3 columns.
- JESUS MARIA AND FLORES MILLS, GUANAJUATO. By C. T. Rice. E. & M. J., vol. 86, p. 615. 13 columns. I.
- HACIENDA BUBURON, AN OLD MEXICAN SILVER MILL. By M. R. Lamb. E. & M. J., vol. 86, p. 663. 6 columns. I.
- THE NEW ESPERANZA MILL AT EL ORO, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 760. 5 columns. I.
- MINING AND MILLING AT STOCKTON, UTAH. By Robt. B. Brinsmade. E. & M. J., vol. 85, p. 611. 6 columns. I.
- BOSTON SUNSHINE MILL, UTAH. By G. W. Wood. Min. & Sci. Press, vol. 99, p. 295. 2½ columns. I.
- MILLS AND MILLING AT RAWHIDE, NEVADA. E. & M. J., vol. 87, p. 347. 4½ columns. I.
- WORKING OF ORES AT THE AUBURN MILL, NEVADA. Min. & Sci. Press, vol. 22, p. 248. 2½ columns.
- YELLOW JACKET MILL, COMSTOCK LODGE. By W. Symmes. Min. & Sci. Press, vol. 97, p. 157. 3½ columns. I.
- THE BUTTERS SLIME-FILTER AT THE CYANIDE PLANT OF THE COMBINATION MINES COMPANY, GOLDFIELD, NEVADA. By M. R. Lamb. T. A. I. M. E., vol. 38, p. 200. 10 pages. I.
- See also CYANIDING OF ORES.
- THE GOLDFIELD CONSOLIDATED 600-TON MILL. By P. E. Barbour. E. & M. J., vol. 86, p. 467. 22½ columns. I.
- MILLING PRACTICE IN NEVADA GOLDFIELD REDUCTION WORKS. By E. S. Leaver. Min. & Sci. Press, vol. 97, p. 254. 2½ columns. I.
- TREATMENT OF SULPHIDE ORES AT GOLDFIELD, NEVADA: Milling Process. Min. & Sci. Press, vol. 96, p. 841. 8 columns. I. Flow-sheet.
- GOLDFIELD MILL IMPROVEMENTS. Min. & Sci. Press, vol. 99, p. 825. 1 column.
- EQUIPMENT AND PRACTICE AT FLORENCE-GOLDFIELD MILL. By H. G. Morris. E. & M. J., vol. 89, p. 365. 9½ columns. I.
- MILLING AT COMBINATION MILL, GOLDFIELD, NEVADA. By M. R. Lamb. M. & M., vol. 29, p. 209. 1 column. I.
- THE COMBINATION MINE. By E. A. Collins. Min. & Sci. Press, vol. 95, p. 397. 4½ columns, I.; p. 435, 6½ columns, I.
- CONCENTRATION PRACTICE AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 494. 8½ columns. I.
- THE DESERT MILL, MILLERS, NEVADA. By A. R. Parsons. Min. & Sci. Press, vol. 95, p. 494. 8½ columns. I.

- MILLING PLANT OF THE MONTANA-TONOPAH MINING COMPANY.** By G. H. Rotherham. *Min. & Sci. Press*, vol. 97, p. 324. 7½ columns. I.
- TONOPAH EXTENSION MILL.** By J. G. Kirchen. *Min. & Sci. Press*, vol. 100, p. 522. 4 columns.
- NEW MILL OF THE TONOPAH EXTENSION MINING COMPANY.** E. & M. J., vol. 89, p. 1066. 3 columns. I.
- MILLING AT TONOPAH, NEVADA.** E. & M. J., vol. 87, p. 595. 6 columns. I.
- MINING AND REDUCTION OF ELY, NEVADA, ORES.** By R. L. Herrick. M. & M., vol. 29, p. 167. 11½ columns. I.
- PITTSBURG SILVER PEAK MILL, NEVADA.** By H. Hanson. M. & M., vol. 29, p. 569. 8½ columns. I.
- MECHANICAL TREATMENT OF GOLD ORE.** By W. J. Adams. *Min. & Sci. Press*, vol. 95, p. 374. 1½ columns.
- See also **AMALGAMATION.**
- IMPROVEMENTS IN THE HOMESTAKE MILL.** *Min. & Sci. Press*, vol. 95, p. 812. 1 column. I.
- SIMMER DEEP AND JUPITER REDUCTION WORKS.** By J. E. Thomas. *Min. & Sci. Press*, vol. 99, p. 396. 6½ columns. I.
- CONCENTRATION OF FLAKE GRAPHITE.** By F. D. Chester. E. & M. J., vol. 88, p. 824. 3½ columns.
- See also **OCCURRENCE OF GRAPHITE.**
- UTILIZATION OF IRON SANDS.** *Min. & Sci. Press*, vol. 20, p. 355. 1 column.
- See also **SAND TREATMENT.**
- TREATMENT OF THE BRUCE IRON ORE, ONTARIO.** J. C. M. I., vol. 10, p. 160. 2 pages.
- CONCENTRATION OF MESABI ORE.** By H. H. Stock. M. & M., vol. 29, p. 97. 3½ columns. I.
- MILLING PRACTICE AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA.** E. & M. J., vol. 89, p. 422. 4 columns. I. Flow-sheet.
- MINE AND MILL OF LE ROI No. 2, LTD., ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen. E. & M. J., vol. 89, p. 176. 5½ columns. I.
- TABLE CONCENTRATION IN THE CŒUR D'ALENE DISTRICT.** *Min. Mag.*, London, vol. 2, p. 444. 4 columns. I.
- MILLING OF LEAD-SILVER ORE.** By G. Caetani. *Min. Mag.*, London, vol. 2, p. 361, 14 columns, I.; p. 441, 12 columns, I.; p. 48, 16 columns, I.
- ORE DRESSING IN THE CŒUR D'ALENE DISTRICT.** By E. S. Wiard. E. & M. J., vol. 88, p. 1055, 13½ columns, I.; p. 1104, 16 columns, I.; p. 1205, 21 columns, I.
- TREATMENT OF ORE IN THE CŒUR D'ALENE LEAD REGION.** *Min. & Sci. Press*, vol. 96, p. 626. 3 columns. I.
- MILLING IN THE CŒUR D'ALENE.** By G. Huston. *Min. & Sci. Press*, vol. 96, p. 232. 1½ columns.
- NEW CONCENTRATOR OF THE BUNKER HILL AND SULLIVAN.** By G. Caetani. *Min. & Sci. Press*, vol. 100, p. 120. 5½ columns. I.
- ORE DRESSING IN THE CŒUR D'ALENE DISTRICT.** By E. S. Wiard. E. & M. J., vol. 89, p. 20, 23 columns, I.; p. 375, 7½ columns, I.; p. 514, 13½ columns, I.; p. 570, 7½ columns, I.; p. 822, 10 columns, I.; p. 875, 7½ columns, I.; p. 967, 8½ columns, I.
- CONCENTRATING DIFFICULT LEAD ORES AT BROKEN HILL, NEW SOUTH WALES.** By G. W. Williams. E. & M. J., vol. 87, p. 939. 6 columns.
- ORE TREATMENT AT THE BROKEN HILL PROPRIETARY MINE.** By G. D. Delprat. T. Au. I. M. E., vol. 12, p. 1. 28 pages. I.
- CONCENTRATION AT THE BLUE BELL MINE, BRITISH COLUMBIA.** E. & M. J., vol. 88, p. 785. 2½ columns.
- THE AMERICAN MILL AT OROGONO, JOPLIN DISTRICT.** By Doss Brittain. E. & M. J., vol. 85, p. 1039. 6½ columns. I.

- IMPROVEMENTS IN THE ORONOGO CIRCLE MILL No. 5.** By O. Ruhl. E. & M. J., vol. 86, p. 993. 5 columns. I.
- RECLAIMING ZINC AND LEAD ORES.** By L. L. Wittich. M. & M., vol. 30, p. 503. 4½ columns. I.
- ORE DRESSING IN THE JOPLIN DISTRICT.** M. & M., vol. 30, p. 383. 3½ columns. I.
- SOUTHEAST MISSOURI MINING.** By S. S. Clarke. Min. & Sci. Press, vol. 100, p. 528. 2 columns.
- MILLING AT DOE RUN, SOUTHEAST MISSOURI.** E. & M. J., vol. 89, p. 610. 2 columns. I.
- THE MINING AND MILLING OF SILVER-LEAD AND ZINC ORES AT PIERREFITTE MINES, FRANCE.** By W. W. Van Ness. T. A. I. M. E., vol. 39, p. 369. 22½ pages. I.
- CONCENTRATION OF SILVER-LEAD ORES.** By V. F. S. Low. T. Au. I. M. E., vol. 10, p. 197. 16 pages. I.
- CONCENTRATION OF LEAD-SILVER ORES.** By V. F. S. Low. T. Au. I. M. E., vol. 11, p. 164. 12 pages. I.
- DRESSING OF ORES: A Freiberg Process.** Min. & Sci. Press, vol. 20, p. 2, 1½ columns; p. 66, 1½ columns, I.; p. 130, 1 column, I.
- WET CONCENTRATION AT MIDVALE, UTAH.** By L. A. Palmer. M. & M., vol. 30, p. 517. 5½ columns. I.
- CONCENTRATION AT FREIBERG, GERMANY.** E. & M. J., vol. 87, p. 988. 1½ columns.
- METHOD OF MILLING LEAD ORES AT THE CUMBERLAND MINES, ENGLAND.** E. & M. J., vol. 85, p. 299. 2 columns. I.
- MILLING FLORIDA PHOSPHATES.** E. & M. J., vol. 87, p. 490. 8 columns. I.
- See also **OCCURRENCE OF PHOSPHATES.**
- TIN-DRESSING.** By H. W. Hutchin. Min. Mag., London, vol. 2, p. 295. 3 columns.
- NOTES ON TIN DRESSING.** By H. W. Hutchin. T. I. M. & M., vol. 18, p. 69. 38½ pages. I.
- NOTES ON TIN ORE DRESSING AT SOUTH CROFTY.** E. & M. J., vol. 87, p. 651. 4 columns.
- TIN-DRESSING AT STANLEY HILLS, NORTH QUEENSLAND.** By W. L. Cleland. T. Au. I. M. E., vol. 12, p. 154. 10 pages. I.
- CONCENTRATION OF TIN ORES AT CHOROLQUE, BOLIVIA.** Min. Mag., vol. 4, p. 214. 2 columns. D.
- TIN MINING AND MILLING IN THE BOLIVIAN ANDES.** By G. W. Dean. E. & M. J., vol. 90, p. 1053. 5½ columns. I.
- ZINC MINING IN NEW JERSEY.** By H. B. Kümmel. E. & M. J., vol. 87, p. 11. 1½ columns.
- THE GREAT BOULDER PERSEVERANCE MILL.** Min. Mag., vol. 4, p. 388. ¼ column. Flow-sheet.
- CONCENTRATION AT CATAMA, CHILE.** By F. A. Sundt. M. & M., vol. 31, p. 605. 3½ columns.

CONCRETE, MORTARS, AND PLASTERS

- Cement and Concrete: Their Properties and Uses**
- LIME IN CEMENT.** Min. & Sci. Press, vol. 95, p. 282. ¼ column.
- PORTLAND CEMENT CALCULATIONS.** M. & M., vol. 31, p. 25. 1½ columns.
- PORTLAND CEMENT.** By J. L. Howard. Min. & Sci. Press, vol. 98, p. 630. 8½ columns.
- PORTLAND CEMENT.** Min. & Sci. Press, vol. 96, p. 170. ¼ column.
- THE MANUFACTURE OF PORTLAND CEMENT.** By W. M. Kinney. P. E. Soc. W. Pa., vol. 25, p. 103. 36 pages. I.
- NOTES ON THE BRITISH STANDARD SPECIFICATION FOR PORTLAND CEMENT, AND OBSERVATIONS ON THE**

- USE OF WATER AND CONCRETE IN STRUCTURAL WORK.** By W. Watts. T. I. M. E., vol. 37, p. 318. 13 pages.
- CALCULATING THE HEAT BALANCE OF LIME KILNS.** By Robt. Schorr. E. & M. J., vol. 85, p. 613. 6 columns.
- CHARACTERISTIC TESTS OF CEMENT.** By L. L. Kimball. U. S. G. S., Mineral Resources, 1904.
- COMBUSTION IN CEMENT-BURNING.** By B. E. Eldred. T. A. I. M. E., vol. 41, p. 479, 10½ pages; p. 905, 3½ pages.
- PORTLAND CEMENT MORTARS AND THEIR CONSTITUENT MATERIALS; Results of Tests Made at the Structural-Materials Laboratories, Forest Park, St. Louis, Missouri.** By R. L. Humphrey. U. S. G. S., Bull. 331. 130 pages. I. 1908.
- ON THE EMPLOYMENT OF RUBBLE BETON OR CONCRETE IN WORKS OF ENGINEERING AND ARCHITECTURE.** By J. Rennie. Min. Mag., vol. 10, p. 60. 4 pages.
- TESTS OF CONCRETE.** By R. L. Humphrey. M. & M., vol. 29, p. 159. 1½ columns.
- THE BOND BETWEEN CONCRETE AND STEEL.** By T. L. Condron. J. W. Soc. E., vol. 12, p. 100. 17½ pages. I.
- DEFORMED BARS vs. ROUND RODS ANCHORED FOR REINFORCED CONCRETE.** By J. H. Toupet. P. E. Soc. W. Pa., vol. 25, p. 505. 35 pages. I.
- REINFORCED CONCRETE TRESTLES FOR RAILWAYS.** By C. H. Cartledge. J. W. Soc. E., vol. 15, p. 543. 30 pages. I.
- BONDING NEW TO OLD CONCRETE.** P. C. M. & M. Soc. S. A., vol. 10, p. 156. ¾ column.
- STRENGTH OF CONCRETE JOINTS.** By J. L. Miner. P. E. Soc. W. Pa., vol. 24, p. 471. 20½ pages. D.
- STRENGTH OF CONCRETE BEAMS.** By R. L. Humphrey. U. S. G. S., Bull. 344. 59 pages. 1908.
- NOTES ON CONCRETE CONSTRUCTION.** By R. A. Cummings. P. E. Soc. W. Pa., vol. 26, p. 159. 28 pages. I.
- FORMS FOR CONCRETE.** By J. D. Stevenson. P. E. Soc. W. Pa., vol. 26, p. 270. 46 pages. I.
- HOW TO PREVENT FAILURE IN CONCRETE CONSTRUCTION.** By W. Michaelis. J. W. Soc. E., vol. 12, p. 455. 18 pages.
- CONCRETE BOATS AND BARGES.** Min. & Sci. Press, vol. 97, p. 95. ¾ column.
- Use of Concrete in Mines**
- FILBERT MINE CONCRETE-LINED SHAFTS.** By A. F. Allard and H. S. Patterson. M. & M., vol. 30, p. 557. 17 columns. I.
- SINKING CONCRETE SHAFTS IN QUICKSAND.** By F. W. Adgate. E. & M. J., vol. 88, p. 1159. 9½ columns. I.
- CONCRETE LININGS IN SHAFT SINKING.** By R. H. Rowland. E. & M. J., vol. 88, p. 359. 7 columns. I.
- CONCRETE SHAFT LINING.** Min. & Sci. Press, vol. 97, p. 745. 6½ columns. I.
- BRIER HILL CONCRETE-LINED SHAFT, VULCAN, MICHIGAN.** By W. Kelly. E. & M. J., vol. 89, p. 970. 6 columns. I.
- CONCRETE SHAFT LININGS.** M. & M., vol. 29, p. 563. 6½ columns. I.
- CONCRETE SHAFT LINING.** Min. & Sci. Press, vol. 95, p. 183. 4½ columns. I.
- CONCRETE SHAFT LININGS.** T. L. S. M. I., vol. 15, p. 92. 4½ pages. I.
- THE BRIER HILL CONCRETE-LINED SHAFT.** By W. Kelly. T. L. S. M. I., vol. 14, p. 140. 6 pages. I.
- CONCRETE LINED SHAFTS SUNK THROUGH QUICKSAND.** T. L. S. M. I., vol. 14, p. 55. 16 pages. I.

- CONCRETE SHAFT LINING. M. & M., vol. 31, p. 516. 10 columns. I.
- METHOD OF SINKING AND CONCRETING THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 558. 4 columns. I.
- SINKING REINFORCED CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate. T. L. S. M. I., vol. 14, p. 55. 16 pages. I.
- CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate. M. & M., vol. 30, p. 271. 5½ columns. I.
- SINKING A REINFORCED CONCRETE MINE SHAFT. By A. H. Fay. E. & M. J., vol. 88, p. 599. 4½ columns. I.
- SINKING A REINFORCED CONCRETE SHAFT. By L. L. Brown. Min. & Sci. Press, vol. 97, p. 745. 6½ columns. I.
- STEEL FORMS FOR CONCRETE SHAFT LINING. M. & M., vol. 30, p. 557. 1 column.
- STEEL FORMS USED IN LINING THE BRIER HILL MINE WITH CONCRETE. E. & M. J., vol. 89, p. 971. 1 column. I.
- FORMS FOR CONCRETING SHAFTS. M. & M., vol. 30, p. 634. ¾ column.
- SINKING IN WET GROUND BY INJECTING CONCRETE: Cementation. By J. Lombois. E. & M. J., vol. 87, p. 653. 8½ columns. I.
- THE USE OF CEMENT FOR TUBBING IN DEEP SHAFTS. E. & M. J., vol. 86, p. 427. 1 column.
- CONCRETE-STEEL CAISSONS: Their Development and Use for Breakwater, Piers and Revetments. By W. V. Judson. J. W. Soc. E., vol. 14, p. 533. 76 pages. I.
- NORTH LAKE CONCRETE SHAFT AND FOUNDATION FOR STEEL HEADFRAME. E. & M. J., vol. 88, p. 722. 1 column. I.
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- CONCRETE ENGINE FOUNDATION. By A. H. Shaw. M. & M., vol. 30, p. 170. 1¾ columns. I.
- SOME DETAILS OF CONCRETE CONSTRUCTION, RETAINING WALLS, ETC. By L. J. Hotchkiss. J. W. Soc. E., vol. 12, p. 349. 23 pages. I.
- See also FOUNDATIONS FOR BUILDINGS and MINE CONSTRUCTIONS.
- CONCRETE IN THE HUDSON RIVER TUNNELS. By W. M. Torrance. J. W. Soc. E., vol. 13, p. 632. 30 pages. I.
- SPECIAL CONCRETE STRUCTURES IN THE HUDSON RIVER TUNNELS. By W. M. Torrance. J. W. Soc. E., vol. 13, p. 632. 30 pages. I.
- See also TUNNEL SUPPORT.
- AMOUNT OF CONCRETE USED IN LINING THE CONCRETE SHAFT AT THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 565. Table.
- METHOD OF CONCRETING SHAFTS. M. & M., vol. 30, p. 633. 2 columns. I.
- USE OF CONCRETE IN THE CLONAN SHAFT, MINEVILLE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 85, p. 111. 1½ columns.
- CONCRETE FOR SHAFT TRACKS. P. C. M. & M. Soc. S. A., vol. 10, p. 415. ¾ column.
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- THE USE OF CONCRETE FOR MINE SUPPORT. By W. R. Crane. T. I. M. E., vol. 37, p. 560. 26 pages. I.
- CONCRETE IN MINE SUPPORT. By W. R. Crane. Min. & Sci. Press, vol. 98, p. 320. 11 columns. I.
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- CONCRETE MINE PROPS USED IN GERMANY. E. & M. J., vol. 88, p. 414. 1 column. I.
- See also METHODS OF TIMBERING.
- CAPACITY OF CIRCULAR VATS PER FOOT OF DEPTH. By W. A. Caldecott. Min. & Sci. Press, vol. 101, p. 412. Table.

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COST OF PARTS OF MELONES DAM CONSTRUCTION. Min. & Sci. Press, vol. 84, p. 128. Tables.

COST OF RESTRAINING WORKS FOR MINING DEBRIS. Proceedings California Miner's Assoc. Annual, 1906, p. 125. Table.

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COST OF RUNNING A GOLD-DREDGE FOR A WEEK. T. I. M. E., vol. 21, p. 377. Table.

COST OF OPERATING DREDGES (GOLD). Proceedings California Miner's Assoc., Annual, 1906, p. 112.

WORKING COSTS IN GOLD DREDGING. Min. & Sci. Press, vol. 91, p. 178. Table.

COST OF OPERATING A GOLD-DREDGE. T. A. I. M. E., vol. 40, p. 514. $1\frac{1}{2}$ pages.

CAPACITY AND COST OF DREDGING: Chicago Drainage Canal. Engineering, London, vol. 63, p. 753. Table.

COST OF DREDGING: Types of Dredges; Cost by Dipper Dredge; Cost by Grapple Dredge; Cost by Bucket Elevator Dredge; Cost by Hydraulic Dredge; and Contract Prices of Dredging.

EARTHWORK AND ITS COST. Gillette, Chapter 16.

COST OF DREDGING FOR GOLD IN ALASKA. E. & M. J., vol. 80, p. 212. Note.

COST OF DREDGING, WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., p. 453. Notes.

COST AND PROFITS OF GOLD DREDGING IN NEW ZEALAND. Engineering, London, vol. 68, p. 35.

COST OF GOLD DREDGING IN NEW ZEALAND. Min. & Sci. Press, vol. 85, p. 279. Table.

COST OF BUCKET DREDGING IN NEW ZEALAND. T. Au. I. M. E., vol. 12, pp. 54-56.

COST OF GOLD DREDGING IN CALIFORNIA. Min. & Sci. Press, vol. 88, p. 93. Tables.

COSTS AND PROFITS OF GOLD DREDGING IN CALIFORNIA. E. & M. J., vol. 71, p. 120.

WORKING COSTS OF GOLD DREDGING IN CALIFORNIA. By C. Janin and W. B. Winston. Min. & Sci. Press, vol. 101, p. 150. 2½ columns. Table.

COST OF DREDGING IN THE RIVERS OF FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 585. 1 page. I.

COST OF DREDGING ON THE SNAKE RIVER, IDAHO, WITH A SUCTION DREDGER. E. & M. J., vol. 73, p. 241.

COST OF AN ELEVATOR DREDGER (CHAIN-BUCKET TYPE) IN THE SAME LOCALITY AS ABOVE. E. & M. J., vol. 73, p. 242.

COST OF GOLD-DREDGING IN THE URALS. T. A. I. M. E., vol. 37, p. 326. Table.

COST OF GOLD DREDGING IN THE URALS. Min. & Sci. Press, vol. 93, p. 228. Table.

COST OF DREDGING IN RUSSIA. By W. H. Shockley. Min. & Sci. Press, vol. 100, p. 636. 4½ columns. Tables.

See also **DREDGING**.

Cost of Drilling and Boring

COST OF BORING WELLS IN DIFFERENT KINDS OF MATERIAL. Well-Boring, C. Isler, p. 67.

COST OF DRILLING EQUIPMENT FOR DEEP DRILLING. E. & M. J., vol. 84, p. 880. Table.

RATE (COST) OF BORING ARTESIAN WELLS. Min. & Sci. Press, vol. 56, p. 183. Note.

ROCK BORING BY MACHINERY ECONOMICALLY SUCCESSFUL. Min. & Sci. Press, vol. 19, p. 232. ¼ column.

COST OF DRILLING OUTFIT FOR ARTESIAN WELLS AND OTHER DEEP BORING. Min. & Sci. Press, vol. 37, p. 289. 1 column.

COST OF ARTESIAN WELLS, SAN FRANCISCO. Min. & Sci. Press, vol. 37, p. 354, ½ column; vol. 38, p. 18.

COST OF A 5-IN. BORE-HOLE, 1,809 FEET DEEP. T. I. M. E., vol. 15, p. 120. Table.

COST OF LARGEST BORE-HOLE IN EUROPE. Engineering, London, vol. 71, p. 25. 1½ columns.

COST OF DRIVING WELLS. Well-Boring. C. Isler, p. 39. Table.

DRILLING COSTS IN TASMANIA TIN DEPOSITS. M. & M., vol. 31, p. 314. Tables.

COST OF DRILLING FOR OIL IN MEXICO. Min. Mag., London, vol. 3, p. 286. Table.

ON THE RELATIVE COSTS OF MINING NARROW VEINS: Hand Drills vs. Air Drills. By J. E. Hardman. J. M. Soc. N. S., vol. 3, p. 55. 5½ pages.

COST OF POWER vs. HAND-DRILLING ON LAKE SUPERIOR. E. & M. J., vol. 35, p. 6. ¾ column.

See also **HAND DRILLS**.

SPEED AND COST OF DRILLING. Miner's Pocket Book, Lock, pp. 173, 174, 175, 176, 177, 178, 179.

COST AND COMPARATIVE COSTS OF HAND AND MACHINE DRILLING.

- Miner's Pocket Book, Lock, pp. 209, 210. Tables.
- RELATIVE COSTS OF LARGE AND SMALL DRILLS IN DEVELOPMENT WORK. T. A. I. M. E., vol. 37, p. 86. Tables.
- COST OF DRILLING IN VARIOUS KINDS OF ROCK, SOUTH NORWAY. T. I. M. & M., vol. 7, p. 339. Table.
- ESTIMATING COST OF OPERATING POWER DRILLS. Min. & Sci. Press, vol. 89, p. 387. $\frac{1}{2}$ column.
- COST OF OPERATING MACHINE DRILLS, PORTLAND MINE, COLORADO. T. A. I. M. E., Feb., 1906, p. 1305. Table.
- RATES AND COSTS OF DRILLING. The Witwatersrand Goldfields, p. 382.
- COST OF MACHINE DRILLING IN THE RAND MINE. Witwatersrand Goldfields, p. 382. 5 pages. Tables.
- COST OF OPERATING DRILLS BY KAF. FIRS AND WHITE LABOR. P. C. M. & M. Soc. S. A., vol. 8, p. 219. 2 columns.
- COST OF DRILLING ON THE RAND. Min. & Sci. Press, vol. 94, p. 337. Table.
- COST OF MACHINE DRILLS AND OPERATION AT THE PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 97. Table.
- COST OF DRILLING: Machine Work. Min. & Sci. Press, vol. 100, p. 861. $\frac{1}{2}$ column.
- See also MACHINE OR POWER DRILLS.
- COST OF HAND VS. AIR DRILLS IN MINING NARROW VEINS. Coll. Eng. & Met. Miner, vol. 14, p. 267. $1\frac{1}{2}$ columns.
- FIRST-COST AND WORKING COSTS OF AN INGERSOLL-SERGEANT HEADING-MACHINE PLANT. T. I. M. E., vol. 31, pp. 370, 371, 372, 373, 374.
- COST OF MAINTENANCE OF ROCK DRILLS. Min. & Sci. Press, vol. 89, p. 422. Table.
- COST OF ELECTRIC DRILLING. Min. & Sci. Press, vol. 87, p. 39. Table.
- COST OF OPERATING ELECTRIC DRILLS. Min. & Sci. Press, vol. 89, p. 163. Table.
- COST OF ELECTRIC DRILLING IN DIORITE. T. I. M. & M., vol. 10, pp. 222 and 225.
- TWO RECORDS OF COSTS IN DRILLING ROCK WITH ELECTRIC AIR DRILLS. E. & M. J., vol. 88, p. 310. $2\frac{1}{2}$ columns.
- COST OF DRILLING COAL BY ELECTRIC DRILL. M. & M., vol. 17, p. 485. Table.
- See also ELECTRIC DRILLS.
- COST OF CHURN DRILLING. E. & M. J., vol. 89, p. 1005. $\frac{1}{2}$ column.
- COST OF CHURN DRILLING AT MIAMI, ARIZONA. M. & M., vol. 30, p. 752. $\frac{1}{2}$ column. Table.
- COSTS OF CHURN DRILLING AT SILVERBELL, ARIZONA. E. & M. J., vol. 90, p. 851. Table.
- COST OF CHURN DRILLING AT ELY, NEVADA. M. & M., vol. 29, p. 527. $\frac{1}{2}$ column.
- COST OF CHURN DRILLING AT ELY, NEVADA. M. & M., vol. 29, p. 81. Tables.
- COST OF DRILLING BY CHURN-DRILL, IN ILLINOIS OIL FIELD. Min. & Sci. Press, vol. 99, p. 616. $\frac{1}{2}$ column.
- COST OF CHURN AND DIAMOND DRILLING IN WISCONSIN. E. & M. J., vol. 81, p. 1233.
- COST OF ROPE DRILLING. Second Geol. Sur. Pa., AC, p. 39.
- COST OF PROSPECT BORING BY ROPE SYSTEM. Miner's Pocket Book, Lock, p. 136. Tables.
- SPEED AND COST OF SPRING-POLE DRILLING. Sch. Min. Quart., vol. 16, p. 21. 2 pages. Tables.
- COST OF DRILLING 15- TO 20-FOOT HOLES BY CHURN DRILL: 2 Men Operating. Min. & Sci. Press, vol. 91, p. 3.
- COST OF OPENING OIL WELLS IN EASTERN ILLINOIS. Min. & Sci. Press, vol. 99, p. 680. Table.

- COST OF DRILLING RIG FOR OIL-WELL WORK.** Min. & Sci. Press, vol. 101, p. 776. 2 columns. Tables.
- COST OF CASING FOR OIL-WELL DRILLING.** Min. & Sci. Press, vol. 101, p. 776. Tables.
- PROSPECT DRILLING IN THE KANSAS GAS FIELDS FOR HOLES 1200 TO 1500 FEET DEEP.** E. & M. J., Sept. 12, 1903, p. 396. $\frac{1}{2}$ column.
- COST OF PROSPECT DRILLING AT JOPLIN.** M. & M., vol. 29, p. 7. $\frac{1}{2}$ column.
- COST OF DRILLING BY CHURN DRILL AT GALENA, KANSAS.** Univ. Geol. Sur. of Kans., vol. 8, p. 340. 1 $\frac{1}{2}$ pages.
- COST OF CHURN DRILLING IN THE MESABI IRON RANGE, MINNESOTA.** E. & M. J., vol. 75, pp. 896 and 897.
- See also CHURN DRILLS AND DRILLING, and PROSPECT DRILLING.
- COST OF OPERATING A STEAM PROSPECT DRILL IN ALASKA.** E. & M. J., vol. 86, p. 220. Table.
- COST OF DRILLING FOR DREDGING.** Min. & Sci. Press, vol. 87, p. 39. Table.
- COST OF DIAMOND DRILLING IN WESTERN AUSTRALIA BY TON AND OUNCE.** M. & M., vol. 24, p. 175. Tables.
- COST OF DIAMOND DRILLING.** E. & M. J., vol. 81, p. 1054. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING.** Min. Mag., London, vol. 2, p. 390. $\frac{1}{2}$ column.
- SCHEDULE OF PRICES FOR BORE-HOLES: Diamond Drilling.** T. F. I. M. E., vol. 1, p. 20. Table.
- COST OF DIAMOND DRILLING, LAKE SUPERIOR.** E. & M. J., vol. 81, p. 236.
- COST OF DIAMOND DRILLING.** M. & M., vol. 20, p. 244. $\frac{1}{2}$ column.
- NOTES ON COST OF DIAMOND DRILLING.** By J. J. Jordan. M. & M., Feb., 1902, p. 321. $\frac{1}{2}$ column.
- COSTS OF DIAMOND DRILLING IN THE BOUNDARY DISTRICT, BRITISH COLUMBIA.** By F. Keffer. M. & M., vol. 28, p. 508. 3 columns.
- COST OF DIAMOND DRILLING.** Min. & Sci. Press, vol. 75, p. 241.
- DETAILED COST OF DIAMOND DRILLING AT BOUNDARY DISTRICT, BRITISH COLUMBIA.** M. & M., vol. 27, p. 177. Tables.
- NOTE ON THE COST OF DIAMOND DRILLING.** By J. J. Jordan. T. I. M. & M., vol. 9, p. 297. 3 pages.
- COST OF DIAMOND DRILLING: In Canada, Michigan, and Minnesota.** T. F. C. M. I., vol. 1, p. 206, etc.
- COST AND TIME OF DRILLING THROUGH DIFFERENT MATERIALS WITH DIAMOND DRILL (CROTON AQUEDUCT).** T. A. I. M. E., vol. 19, pp. 750, 751, 752, 753, 754.
- COST OF DIAMOND DRILLING IN WEST AFRICA.** T. I. M. & M., vol. 12, pp. 319 and 320.
- COST OF DIAMOND DRILLING IN THE TRANSVAAL, SOUTH AFRICA.** T. I. M. & M., vol. 6, p. 172, etc.
- COST AND RESULTS OF GEOLOGICAL EXPLORATIONS WITH THE DIAMOND DRILL IN THE ANTHRACITE REGIONS OF PENNSYLVANIA.** By L. A. Riley. T. A. I. M. E., vol. 5, p. 303.
- COST OF BORING BY DIAMOND DRILL IN NOVA SCOTIA.** E. & M. J., vol. 19, p. 272. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING: Labor, Reaming and Casing, Carbons, Cost of Bit per Foot, Water, and Fuel.** Diamond Drilling. G. A. Denny, pp. 84, 86, 87, 92 and 93.
- COST OF DIAMOND DRILLS AND SUPPLIES.** Diamond Drilling. G. A. Denny, p. 154.
- COST OF DIAMOND DRILLING WELL-BORING.** C. Isler, pp. 170, 171 and 172.
- COST OF DIAMOND DRILLING.** M. & M., Dec., 1901, p. 207. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING.** Second Geol. Sur., Pa., AC, p. 42. Tables.

- COST OF DIAMOND DRILLING, WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., pp. 155, 156.
- COST OF DIAMOND DRILLING ON THE RAND.** Witwatersrand Goldfields, pp. 147 and 148. Table.
- COST OF DIAMOND DRILLING.** Min. & Sci. Press vol. 90, p. 8. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING IN MESABI IRON RANGE.** E. & M. J., vol. 75, pp. 896-897.
- COST OF DIAMOND DRILLING AT MOUNT BISCHOFF TIN MINES.** Tin Deposits of the World, p. 172.
- COST OF DIAMOND DRILLING:** New South Wales, South Africa, Mexico, Etc. Miner's Pocket Book, Lock. pp. 141, 142. 2 pages.
- DIAMOND DRILLING IN LAKE SUPERIOR AMYGDALOIDAL ROCK, SANDSTONE AND CONGLOMERATE 1904** E. & M. J., vol. 81, p. 236.
- COST OF DRILLING WITH TERRY ROTARY SHOT DRILL.** E. & M. J., vol. 89, p. 1157. $\frac{1}{2}$ column.
- COST OF DIAMOND, CALYX AND HAND DRILLING.** Min. & Sci. Press, vol. 82, p. 239.
- COST OF DIAMOND DRILL WORK:** Cost of Plant, Drilling, Etc. Min. & Sci. Press, vol. 81, p. 404.
- COST OF DIAMOND DRILL WORK:** Cost of Plant, Drilling, Etc. Min. & Sci. Press, vol. 82, pp. 59, 239, 252 and 281. Table.
- COST OF WASH DRILL BORING ON THE GREAT LAKES AND ATLANTIC SHIP CANAL SURVEY.** Eng.-Cont., vol. 27, pp. 108, 132. 4 columns.
- COST OF DIAMOND DRILL BORING IN THE COLORADO COAL MEASURES.** Eng.-Cont., vol. 27, p. 112. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING IN BASALT AND SOFTER SEDIMENTS, AUSTRALIA.** Min. Mag., vol. 11, p. 139.
- COST OF DIAMOND DRILLING.** J. M. Soc. N. S., vol. 9, pp. 80, 87, 88, 89, 92. 4 pages.
- COST OF DIAMOND DRILLING, ENGLAND.** P. C. M., vol. 1, p. 123. Table.
- COST OF DIAMOND DRILLING IN WEST AFRICA.** T. I. M. & M., vol. 12, p. 320. Table.
- NOTE ON COST OF DIAMOND DRILLING.** By J. J. Jordan. T. I. M. & M., vol. 9, p. 297. 4 pages.
- COST OF DIAMOND DRILLING IN COAL MEASURES.** By W. F. Murray. E. & M. J., vol. 83, p. 384. 2 columns.
- PROSPECTING ANTHRACITE MINES BY BORE HOLES.** E. & M. J., vol. 88, p. 258.
- COST OF DIAMOND DRILLING IN THE ANTHRACITE FIELDS, PENNSYLVANIA.** The Anthracite Coal Industry, Roberts, p. 24. 1 page.
- COST OF CORE BORING.** M. & M., vol. 31, p. 323. $\frac{1}{2}$ column. Table.
- COST OF DIAMOND DRILLING.** Min. & Sci. Press, vol. 95, p. 461. $1\frac{1}{2}$ columns.
- THE COST OF DIAMOND DRILLING FOR COAL IN PENNSYLVANIA.** By E. E. White. E. & M. J., vol. 87, p. 649. $2\frac{1}{2}$ columns. Tables.
- NOTES ON THE COST OF DIAMOND DRILLING IN THE BOUNDARY DISTRICT.** By F. Keffer. J. C. M. I., vol. 11, p. 385. 6 pages.
- COST OF DIAMOND DRILL BORING.** Sch. Mines Quart., vol. 16, pp. 21, 23 and 24. Table.
- See also PROSPECT DRILLING.
- PRICE OF DIAMONDS.** Min. & Sci. Press, vol. 96, p. 32. $\frac{1}{2}$ column.
- DUTY ON DIAMONDS FOR DRILLS.** E. & M. J., vol. 85, p. 1001. $\frac{1}{2}$ column.
- THE PRICE (COST) OF DIAMONDS.** E. & M. J., vol. 80, p. 640. 1 column.
- COST OF BLACK DIAMONDS FOR DRILLING.** Min. & Sci. Press, vol. 89, p. 420.
- COST OF DIAMONDS AND DIAMOND DRILLING PER FOOT IN METAL**

- MINING. Ann. Min., Rept. N. S. Wales, 1899, p. 20.
- COST OF CARBON (DIAMONDS) PER FOOT IN DRILLING. J. M. Soc. N. S., vol. 9, p. 74. Table.
- COST ANALYSIS OF STONE (DIAMOND) CONSUMPTION IN UNDERGROUND DIAMOND DRILLING. By B. H. Case. E. & M. J., vol. 88, p. 420. 2 columns. Table.
- COST OF WEAR OF IRON BIT IN DIAMOND DRILLING. Min. & Sci. Press, vol. 85, p. 173.
- See also DIAMOND AND ROTARY DRILLS.
- COST OF DRIVING DRIFTS WITH THE MURPHY AIR-HAMMER DRILL. E. & M. J., vol. 80, p. 362.
- See also AIR HAMMER DRILLS, AND COST OF SHAFT SINKING.
- Cost of Excavating**
- COST OF EARTH AND ROCK EXCAVATION ESPECIALLY FOR RAILROAD WORK. R. R. Construction, Webb, p. 400. Table.
- COST OF EXCAVATING ROCK IN LARGE MASSES. E. & M. J., vol. 84, p. 205. $\frac{1}{2}$ column. Table.
- COST OF A BLAST AT BINGHAM CANYON AND QUANTITY OF ROCK BROKEN: Open-cut Work. M. & M., vol. 29, p. 161. $\frac{1}{2}$ column. I.
- COST OF SHOVELING. E. & M. J., vol. 80, p. 160.
- COST OF LOOSENING AND SHOVELING: Cost of Plowing, of Picking and of Shoveling. Earthwork and Its Costs. By H. P. Gillette. Chap. 3, p. 24. 7 pages.
- METHODS AND COSTS OF LOADING DUMP WAGONS WITH SCRAPERS, AND THE DESIGN OF A LOADING PLATFORM. Eng.-Cont., vol. 27, p. 36. $3\frac{1}{2}$ columns.
- COST OF HANDLING EXCAVATED MATERIALS: Cost of Dumping, Spreading, Ramming, Rolling, Sprinkling and Trimming. Earthwork and Its Costs. H. P. Gillette. Chap. 4, p. 37. 6 pages.
- COST OF HAND-SHOVELING. R. R. Construction, Webb, p. 126.
- COST OF SPREADING EARTH. R. R. Construction, Webb, p. 135.
- COST OF WHEELBARROWS AND CARTS: Rules for Estimating Cost. Earthwork and Its Costs. By H. P. Gillette. Chap. 5, p. 37. 3 pages.
- COST OF LOOSENING SOIL WITH PLOWS. R. R. Construction, Webb, pp. 125, 139. $\frac{1}{2}$ page.
- COST OF LOOSENING SOIL BY PICK. R. R. Construction, Webb, pp. 126, 139. $\frac{1}{2}$ page.
- COST OF REMOVING OVERBURDEN AT THE "JAYA" MINE, SPAIN, PER CUBIC YARD IN THE SOLID: Calculating on the Total Quantity Removed During 1891. T. A. I. M. E., vol. 21, p. 92.
- COST BY BUCK AND DRAG SCRAPERS: Two Examples of Cost by Buck Scrapers. Three Examples of Cost by Drag Scrapers; Errors of Trautwine's Tables; Rule for Estimating Cost. Earthwork and Its Cost, Gillette, Chapter 7, p. 47.
- COST OF GRADING AND TRIMMING AN ATHLETIC FIELD. By D. J. Hauer. Eng.-Cont., vol. 27, p. 14. $2\frac{1}{2}$ columns.
- COST OF CLEARING JUNGLE, ETC., in SUMATRA. T. A. I. M. E., vol. 20, p. 73.
- COST OF CLEARING AND GRUBBING LAND AND BLASTING STUMPS. Eng.-Cont., vol. 27, p. 95. 6 columns.
- COST OF CLEARING AND GRUBBING, ESPECIALLY IN RAILROAD WORK. R. R. Construction, Webb, pp. 395 and 400. Table.
- COST OF STEAM SHOVEL WORK UNDERGROUND. M. & M., vol. 29, p. 575. Tables.
- COST DATA ON STEAM SHOVEL WORK. Eng.-Cont., vol. 27, p. 4. 6 columns.

COST OF STEAM SHOVEL WORK: Especially Loading. R. R. Construction, Webb, p. 127. 1½ pages.

COST OF STEAM SHOVEL WORK IN PLACER MINE IN ALASKA. Min. & Sci. Press, vol. 91, p. 178. Table.

COST OF STEAM SHOVEL EXCAVATING: Output; Power Required and Cost; Cost of Moving; and Rule for Estimating Cost. Earthwork and Its Cost, Gillette, Chap. 10, p. 70.

COST DATA ON THE CONSTRUCTION OF AN EGG-SHAPED SEWER AT SPRINGFIELD, MASSACHUSETTS. Eng.-Cont., vol. 27, p. 28. 1 column.

METHODS AND COSTS OF CONSTRUCTING A LARGE REINFORCED CONCRETE SEWER AT ST. LOUIS, MISSOURI. Eng.-Cont., vol. 27, p. 76. 4 columns. I.

GENERAL COSTS OF EXCAVATING IN CROTON AQUEDUCT: Average Cost of Driving a Single Heading; of Excavating Bench. T. A. I. M. E., vol. 19, p. 758.

COST OF WORK ON THE CHICAGO MAIN DRAINAGE CANAL. J. W. Soc. E., vol. 1, p. 227. 19 pages.

THE COST OF HYDRAULIC EXCAVATION: Amount of Water Required; Cost of Filling Railroad Trestles by Sluicing; Cost of Dam Filling; and Cost of Placer Gravel Mining. Earthwork and Its Cost, Gillette, Chapter 15.

COST OF REMOVING HELL'S GATE. E. & M. J., vol. 40, p. 290. Tables.

See also **SUBMARINE BLASTING, AND EXCAVATION OF EARTH, ROCK, AND ORES, ETC.**

Cost of Explosives and Blasting

COST OF BLASTING AT GALENA, KANSAS. Univ. Geol. Sur. of Kan., vol. 8, p. 344. ½ column.

COST OF BLASTING IN DIFFERENT KINDS OF ROCK. E. & M. J., vol. 25, p. 273. 1 column.

COST OF BLASTING. R. R. Construction, Webb, pp. 126, 144, and 400.

RELATIVE COST OF MINING WITH AND WITHOUT POWDER, ENGLAND. T. N. S. I. M. & M. E., vol. 4, pp. 54, 56. Tables.

METHODS AND COSTS OF BLASTING AND HANDLING BOULDERS. Min. & Sci. Press, vol. 90, p. 86. 3½ columns.

COST OF EXPLOSIVES PER TON ORE AT ALASKA-TREADWELL MINES, 1903. E. & M. J., vol. 78, p. 740.

COST OF BLASTING ON THE RAND, AUSTRALIA AND ELSEWHERE. Miners' Pocket Book, Lock, p. 182. 1 page.

COST AND EFFICIENCY OF SAFETY EXPLOSIVES AS COMPARED WITH GUNPOWDER. By H. Hall. T. F. I. M. E., vol. 13, p. 4. 56 pages.

COST OF EXPLOSIVE GELATINE. E. & M. J., vol. 38, p. 103. ½ column.

COST OF GUNPOWDER, ENGLAND. T. N. S. I. M. & M. E., vol. 2, p. 156.

COMPARATIVE COST OF COMMON AND GIANT POWDER IN BLASTING. The Mines of the West, Raymond, 1869, pp. 35, 37. Tables.

PRICES OF POWDER. Min. & Sci. Press, vol. 48, p. 385. ½ column.

ADVANCE IN POWDER. Min. & Sci. Press, vol. 48, p. 419. ½ column.

COST OF POWDER TO MONTANA COAL MINERS. E. & M. J., vol. 87, p. 849. ½ column.

COST OF GIANT POWDER WORK: Tunneling. E. & M. J., vol. 6, p. 73. Table.

GIANT POWDER: Comparative Figures. Min. & Sci. Press, vol. 18, p. 66. ½ column.

COST OF DYNAMITE AT BUTTE IN CARLOAD AND SMALLER LOTS, IN 1902. Min. & Sci. Press, vol. 85, p. 249.

COST OF DYNAMITE AT KIMBERLEY DIAMOND MINES. T. N. S. I. M. & M. E., vol. 10, p. 102.

COST OF DYNAMITE ON THE RAND. T. N. S. I. M. & M. E., vol. 10, p. 137.

COST OF EXPLOSIVES ON THE RAND, 1902. Witwatersrand Goldfields, p. 457. Table.

COST OF EXPLOSIVES ON THE RAND 1895. Gold Mines of the Rand, pp. 247, 248 and 249.

COST OF EXPLOSIVES AT KIMBERLEY. Gold Min. & Mill. W. Aus., pp. 454, 456 and 457.

COST OF EXPLOSIVES, DETONATORS AND FUSE AND AMOUNT USED PER TON OF ORE MINED IN NEW SOUTH WALES, Ann. Min. Rept., N. S. Wales, 1899, p. 104.

COST OF EXPLOSIVES AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, p. 1327. Table.

COST OF EXPLOSIVES IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 177, 206, 208 and 214.

COST OF EXPLOSIVE PER TON ORE AT GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., p. 616. Table.

COST OF EXPLOSIVES, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 454. Table.

COST OF EXPLOSIVES IN TUNNEL DRIVING. Min. & Sci. Press, vol. 34, p. 166. $\frac{1}{2}$ column.

COST OF EXPLOSIVES IN COAL MINING. Entry Work. M. & M., vol. 19, p. 58. Table.

COST OF POWDER PER TON ANTHRACITE MINED IN PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p. 118.

COST OF POWDER IN THE ANTHRACITE COAL FIELDS OF PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p. 133. 3 pages.

See also **USE OF EXPLOSIVES IN MINING.**

COST OF MAMMOTH BLASTING. T. A. I. M. E., vol. 7, p. 285.

See also **LARGE OR MAMMOTH BLASTS.**

COST OF SUBMARINE BLASTING, PORT FREMANTLE, AUSTRALIA. Gold Min. & Mill., W. Aus., p. 452.

See also **SUBMARINE BLASTING.**

Cost of Flume and Ditch Construction

COST OF FLUME CONSTRUCTION. Miner's Pocket Book, Lock, p. 61. Notes.

COST OF FLUME CONSTRUCTION IN ALASKA. Min. & Sci. Press, vol. 71, p. 26.

COST OF MAKING OPEN-CUT FLUME: 7 Feet Wide at Bottom by 11,000 Feet Long \$27,000, or \$1 per Cubic Yard. E. & M. J. vol. 76, p. 657.

COST OF FLUME AND DITCH CONSTRUCTION. Min. & Sci. Press, vol. 74, pp. 172, 173. Tables.

COST OF FLUMES. E. & M. J., vol. 75, p. 785. Table; vol. 76, pp. 267-268.

COST OF WOOD VS. STEEL FLUMES. J. C. M. I., vol. 6, p. 237.

COST OF SLUICE-BOX CONSTRUCTION. Min. & Sci. Press, vol. 53, p. 245. Table.

See also **HYDRAULIC MINING.**

COST OF CONSTRUCTING A CONCRETE CURB AND GUTTER AT OTTAWA, CANADA. Eng.-Cont., vol. 27, p. 116. 2 columns.

COST OF DITCHING (KIRKPATRICK). Miner's Pocket Book, Lock, pp. 47, 48. Tables.

COST OF DITCHING WITH PLOW AND SCRAPER. Min. & Sci. Press, vol. 93, p. 683.

COST OF TRENCHING. M. & M., vol. 31, p. 694. Table.

RATE OF WORKING AND COST OF DITCH CONSTRUCTION. Min. & Sci. Press, vol. 95, p. 303. Table.

See also **DITCHES AND CHANNELS, AND HYDRAULIC MINING.**

Cost of Fuel

COST OF VARIOUS FUELS. T. A. I. M. E., vol. 40, p. 49. 5 pages.

COST OF ELECTRICITY AND WOOD IN MINES AND MILLS. Min. & Sci. Press, vol. 85, p. 104.

See also **ELECTRICITY IN THE MINE.**

62 COST OF MINING, MILLING, METALLURGY, ETC.

- COMPARATIVE COST OF WOOD AND OIL FOR FUEL, SUTTER CREEK, CALIFORNIA. Min. & Sci. Press, vol. 84, p. 35. Table.
- COST OF GENERATING HORSE POWER WITH WOOD, COAL, OIL, ETC., ON THE MOTHER LODE. E. & M. J., vol. 75, p. 149.
- COMPARATIVE COSTS OF FUEL. E. & M. J., vol. 81, p. 180. $\frac{1}{2}$ column.
- COST OF GASOLINE AND ELECTRIC POWER AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 94, p. 722.
- See also TESTING FUELS AND THEIR VALUE.
- COST OF FUEL AT THE KIMBERLEY DIAMOND MINES. T. N. S. I. M. & M. E., vol. 10, p. 108.
- COST OF FUEL ON THE RAND, 1902. Witwatersrand Goldfields, p. 457. Table.
- SELLING PRICE IN ENGLAND OF COAL, PAST AND PRESENT. Coll. Working and Management, p. 23. 7 pages.
- COST OF COAL ON THE RAND (1895). Gold Mines of the Rand, p. 250. 2 pages.
- COST OF COAL IN ALASKA, THE YUKON, ETC. T. A. I. M. E., vol. 36, pp. 490 and 491.
- COST OF COAL FOR STEAM-POWER. Kent's Mech. Engrs. Pocket-Book. p. 789. $\frac{1}{2}$ page. Table.
- COST OF ANTHRACITE COAL. E. & M. J., vol. 81, p. 1051. $\frac{1}{2}$ column.
- PRICES OF AMERICAN AND CANADIAN COALS AT WINNIPEG FOR YEARS 1876-1896. E. & M. J., vol. 62, p. 127. Table.
- THE COST AND SELLING PRICES OF COAL AND COKE. E. & M. J., vol. 59, p. 145. 1 column.
- AVERAGE PRICE OF COAL IN THE SEVERAL DISTRICTS OF NEW SOUTH WALES. Ann. Min. Rept., N. S. Wales, 1899, p. 58.
- COMPARATIVE COST OF HAND AND POWDERED COAL FIRING. E. & M. J., vol. 81, p. 902. Tables.
- COST OF COAL AND OIL COMPARED. E. & M. J., vol. 76, p. 381.
- COST OF CHARCOAL MADE FROM ONE CORD OF WOOD. T. A. I. M. E., vol. 16, p. 198.
- GERMAN COAL PRICES. E. & M. J., vol. 75, p. 717.
- See also THE COMPOSITION AND CHARACTERISTICS OF COAL.
- COST OF COKE. T. A. I. M. E., vol. 17, p. 48.
- COST OF COKE-MAKING AT THE OLIVER COKE-WORKS, UNITED STATES. T. I. M. E., vol. 27, p. 499. Tables.
- COST OF COKE MAKING. E. & M. J., vol. 54, pp. 250 and 268.
- ESTIMATED COST OF ONE BEEHIVE COKE OVEN. M. & M., vol. 24, p. 5. Table.
- COST OF COKE MADE AT DULUTH, MINNESOTA. T. A. I. M. E., vol. 16, p. 198.
- THE MANUFACTURE AND COST OF COKE. F. Kocener. E. & M. J., vol. 42, pp. 291, 362, 399, 421 and 452.
- COST OF PRODUCING CHARCOAL. E. & M. J., vol. 40, p. 306. $3\frac{1}{2}$ columns.
- COST OF OPERATION OF BI-PRODUCT COKE OVENS. M. & M., vol. 27, p. 255. Tables.
- COST OF DRAWING COKE FROM OVENS BY MACHINE. T. A. I. M. E., vol. 36, p. 359. Table.
- See also COKE: Its Properties and Manufacture.
- COST OF GAS POWER. E. & M. J., vol. 84, p. 917. Table.
- COST OF GAS POWER. T. I. M. E., vol. 15, pp. 331, 334, 335, 338.
- PRICE OF GAS AND COAL IN ENGLAND. E. & M. J., vol. 82, p. 928.
- PRICE OF GAS FUEL IN THE JOPLIN LEAD AND ZINC DISTRICT. E. & M. J., vol. 83, p. 965.
- See also GAS FOR POWER, ETC.

PRICE OF OIL AND NATURAL GAS IN KANSAS CITY, 1906. E. & M. J., vol. 82, p. 880. $\frac{1}{2}$ column.

COST OF OIL FUEL FOR STEAM BOILERS. Min. & Sci. Press, vol. 75, p. 483. $\frac{1}{2}$ column.

COMPARATIVE COST OF OIL AND COKE AS A FUEL. M. & M., vol. 27, p. 370. Tables.

COMPARATIVE COST OF OIL AND COAL AS FUEL IN CALIFORNIA. Min. & Sci. Press, vol. 81, p. 437.

COST: Crude Oil vs. Steam. By Wm. Magenan. Min. & Sci. Press, vol. 92, p. 346. $1\frac{1}{2}$ columns.

THE PRICE OF OIL IN CALIFORNIA. By W. Forstner. Min. Mag., vol. 4, p. 300. 3 columns.

FUEL COST OF POWER BY OIL. Min. & Sci. Press, vol. 84, pp. 231 and 345.

COST OF PRODUCING AND DISTRIBUTING OIL. E. & M. J., vol. 83, p. 577. 2 columns.

COST OF OIL VS. COAL AS FUEL. E. & M. J., vol. 83, p. 247. 1 column.

COST OF CRUDE OIL EXTRACTION FROM SHALES IN FRANCE: also other Cost as Distillation, Chemical Treatment, Etc. T. F. I. M. E., vol. 7, p. 187.

See also **POWER GENERATION BY OIL.**

COST OF BRIQUETTING FUELS. M. & M., vol. 25, pp. 365, 366. Table.

COST OF FUEL BRIQUETTING. T. A. I. M. E., vol. 41, pp. 265 and 266. Tables.

PROFITS IN THE MANUFACTURE OF FUEL BRIQUETTES: Cost per ton. E. & M. J., vol. 77, p. 566. 1 column.

ESTIMATED COST OF BRIQUETTES AND BRIQUETTING. T. A. I. M. E., vol. 35, pp. 101, 102, 103, 104, 105, 106, 107, 108.

COST OF BRIQUETTING IN FRANCE. E. & M. J., vol. 76, pp. 431, 432. Table.

COST OF LIGNITE BRIQUETTING. E. & M. J., vol. 82, p. 639. Tables.

COST OF BRIQUETTING PEAT, PER TON. E. & M. J., vol. 80, p. 51.

See also **BRIQUETTING OF FUELS AND ORES.**

Cost of Handling and Storing

COST OF LOADING COAL INTO CARS IN MINES. E. & M. J., vol. 85, p. 815. 2 columns.

GRAVEL SCREEN AND LOADING APPLIANCE: Use of Scraper in Loading Wagons. Eng.-Cont., vol. 27, p. 44. $\frac{1}{2}$ column. I.

COST OF HANDLING ORE IN STOPES, RAND MINES, SOUTH AFRICA. M. & M., vol. 27, p. 188. Table.

See also **TRAMMING AND MUCKING.**

COST OF THE ERECTION OF A FINGER-CHUTE. Min. & Sci. Press, vol. 94, p. 794. Table. I.

See also **CHUTES FOR LOADING CARS AND SKIPS.**

COST OF HANDLING RESIDUE AT KALGOORLIE. Min. & Sci. Press, vol. 95, p. 370. Table.

COST OF MINING AND HANDLING COAL. T. A. I. M. E., vol. 17, p. 48.

See also **HANDLING AND STORAGE OF MINERAL.**

Cost of Haulage

COST OF UNDERGROUND HAULAGE IN PENNSYLVANIA MINES. Sch. Mines & Quart., vol. 2, p. 197. Tables.

COST OF HAULAGE OF COAL IN MINES. T. F. I. M. E., vol. 12, pp. 260, 265, 270, 271, 272, 276, 278.

COST OF HAULAGE IN ANTHRACITE MINES. Coal Mining Supplement E. & M. J., vol. 88, p. 27. $\frac{1}{2}$ column.

COST OF HAULAGE: Hand-putting (tramming), Pony, Horse-haulage, and Rope or Chain-haulage. T. F. I. M. E., vol. 13, p. 144. Table.

- COST PER TON MILE OF HAULING COAL IN PENNSYLVANIA MINES.** Second Geol. Sur. of Pa., AC, p. 214. Table.
- HAULAGE COSTS:** Mule Haulage, and Electric Haulage. M. & M., Mar., 1902, p. 379.
- COST OF HAULING COAL IN ALABAMA COAL MINES.** E. & M. J., vol. 54, p. 538.
- RELATIVE COSTS OF DIFFERENT HAULAGE SYSTEMS:** Horse, Tail Rope, Electric, Endless Chain, and Endless Rope. Coll. Eng. & Met. Miner, vol. 14, p. 314.
- COST OF SYSTEMS OF HAULAGE.** T. F. I. M. E., vol. 4, pp. 295, 297, 299, 300, 301, 302.
- COST OF INSTALLATION AND OPERATION OF HAULAGE PLANT AT STOCKETT, MONTANA.** M. & M., vol. 19, p. 276.
- COST OF MINE HAULAGE.** M. & M., vol. 21, p. 169. $\frac{1}{2}$ column.
- COST OF HAULAGE IN ALABAMA GOLD MINES.** E. & M. J., vol. 55, p. 486.
- COST OF HAULAGE IN THE ANTHRACITE FIELDS:** Animal, Compressed Air, Tail-rope and Electric. E. & M. J., vol. 84, p. 163.
- COST OF HAULAGE ON THE RAND.** Witwatersrand Goldfields, p. 402. $1\frac{1}{2}$ pages.
- COST OF HAULING AND PUMPING ON THE RAND.** Gold Mines of the Rand, pp. 259, 264 and 265. Table.
- SECONDARY HAULAGE:** Cost of Putting and Driving. By T. E. Forster and F. R. Simpson. T. I. M. E., vol. 15, p. 136. 5 pages.
- COSTS OF HAULAGE:** Maintenance, Wages, Interest and Depreciation. T. I. M. E., vol. 15, pp. 137, 138, 139.
- COST OF UNDERGROUND HAULAGE SYSTEMS.** T. F. I. M. E., vol. 7, pp. 363, 368.
- COST OF HAULING EQUIPMENT FROM ALAMOSA TO RICO, COLORADO, IN THE EARLY DAYS.** U. S. G. S., 22d Ann. Rept., pt. 2, p. 241.
- COST OF TRANSPORTATION IN DRIFT MINING.** Min. & Sci. Press, vol. 68, p. 165. Table.
- See also **HAULAGE SYSTEMS.**
- COST OF ANIMAL HAULAGE.** E. & M. J., vol. 75, p. 331.
- ITEMS REGARDING COST OF MULES FOR MINE HAULAGE.** E. & M. J., vol. 81, p. 669.
- COST OF ANIMAL HAULAGE IN COAL MINES OF TENNESSEE AND ALABAMA.** M. & M., vol. 26, p. 102. 4 columns.
- RELATIVE COST OF MULE AND ELECTRIC HAULAGE IN COLLIERIES.** E. & M. J., vol. 81, p. 1102.
- COST OF ANIMAL HAULAGE UNDERGROUND.** T. F. I. M. E., vol. 13, p. 119.
- See also **ANIMAL HAULAGE.**
- COST OF MULE AND ELECTRIC HAULAGE.** E. & M. J., vol. 82, p. 976. Tables.
- COST OF INSTALLATION OF MULE AND ELECTRIC HAULAGE IN MINES.** E. & M. J., vol. 83, p. 530. Tables.
- COMPARATIVE COST OF MINE HAULAGE BY MULES AND ELECTRIC LOCOMOTIVES.** Eng.-Cont., vol. 27, pp. 95, 138. $2\frac{1}{2}$ and 3 columns.
- COST OF INSTALLING AN ELECTRIC HAULAGE PLANT.** T. L. S. I. M. E. vol. 4, pp. 16 and 22.
- COST OF STEAM AND ELECTRIC HAULAGE.** E. & M. J., vol. 37, p. 292. $1\frac{1}{2}$ columns.
- COST OF HAULAGE BY ELECTRIC MOTORS vs. MULES.** Miner's Pocket Book, Lock, p. 117. Tables.
- COST OF ELECTRICAL HAULAGE.** Miner's Pocket Book, Lock, pp. 283, 284, 285 and 294.
- COST OF ELECTRIC LOCOMOTIVE HAULAGE AT THE 1870-FOOT LEVEL, SHAMROCK 1 AND 2 COLLIERIES, GERMANY.** E. & M. J., vol. 89, p. 1238. Table.

- COST OF ELECTRIC HAULAGE AT PLEASLEY COLLIERY.** T. F. I. M. E., vol. 12, p. 634.
- COST OF ELECTRIC MOTORS, DYNAMOS AND CABLE.** Miner's Pocket Book, Lock, p. 118. Table.
- COST OF ELECTRIC TRACTION.** J. W. Soc. E., vol. 1, p. 762. Table.
- COST OF ELECTRIC- AND MULE-HAULAGE IN COAL MINES.** T. A. I. M. E., vol. 19, p. 281.
- COST OF ELECTRICITY, MULE AND TAIL-ROPE HAULAGE.** T. A. I. M. E., vol. 18, p. 418.
- COST OF MINE HAULAGE.** E. & M. J., vol. 74, p. 407.
- COST OF ELECTRIC- VS. WIRE-ROPE HAULAGE.** T. F. I. M. E., vol. 7, pp. 584, 585.
- COST OF MINE TROLLEY WIRING.** M. & M., vol. 28, p. 453. Table.
- COMPARATIVE COSTS OF TROLLEY AND STORAGE BATTERY HAULAGE.** Min. & Sci. Press, vol. 71, p. 205. Table.
- COST OF COMPRESSED AIR HAULAGE IN A MINE.** Min. & Sci. Press, vol. 84, p. 89. $\frac{1}{4}$ column.
- See also **ELECTRIC HAULAGE.**
- COST OF COMPRESSED AIR HAULAGE.** M. & M., vol. 29, p. 518. $\frac{1}{4}$ column.
- COMPARATIVE COSTS OF COMPRESSED AIR, ELECTRICITY AND MULE HAULAGE.** Min. Mag., vol. 12, p. 383.
- COST OF OPERATING COMPRESSED AIR HAULAGE PLANT.** M. & M., vol. 25, p. 569.
- COST OF COMPRESSED AIR HAULAGE.** M. & M., vol. 21, p. 177. 1 column.
- COST OF COMPRESSED AIR MOTORS FOR GATHERING CARS IN MINES.** T. A. I. M. E., Albany Meeting, Feb., 1903, p. 4. Table.
- ESTIMATED COST OF A COMPRESSED-AIR ROAD IN THE UNITED STATES.** T. A. I. M. E., vol. 19, p. 561.
- See also **COMPRESSED AIR HAULAGE.**
- COST OF TAIL-ROPE HAULAGE.** Miner's Pocket Book, Lock, pp. 293, 294. Tables.
- COST OF INSTALLATION, MAINTENANCE AND OPERATION OF TAIL-ROPE SYSTEM OF HAULAGE.** E. & M. J., vol. 74, p. 679.
- COMPARATIVE COSTS OF HAULAGE BY CHAINS AND WIRE ROPE.** E. & M. J., vol. 33, p. 278. Table.
- COST OF OPERATING UNDERGROUND ROPE HAULAGE IN THE COAL MINES OF THE RHUR DISTRICT.** Glückauf, 1900, p. 141.
- COST OF HAULAGE BY GASOLINE MOTORS AND BY MULES.** M. & M., vol. 31, p. 630. Table.
- See also **GASOLINE MOTORS.**
- COMPARATIVE COST OF LOCOMOTIVE AND MULE HAULAGE.** E. & M. J., vol. 6, p. 154. Tables.
- COST OF LOCOMOTIVE HAULAGE.** E. & M. J., vol. 75, p. 331.
- COST OF HAULAGE BY LOCOMOTIVES AND MULES.** Second Geol. Sur. Pa., AC, p. 222. Tables.
- See also **STEAM LOCOMOTIVES.**
- COST OF VERTICAL AND INCLINED EQUIPMENT.** T. I. M. & M., vol. 11, plate 79.
- COST OF OPERATING A COMBINED GRAVITY AND POWER HOIST SYSTEM IN TENNESSEE.** M. & M., vol. 19, p. 534.
- WORKING AND MAINTENANCE COSTS, FOR ENGINE PLANE, ENGLAND, 1880-83.** T. N. S. I. M. & M. E., vol. 6, p. 107. Tables.
- METHOD OF ASCERTAINING MAINTENANCE COST PER MILE OF ENGINE PLANE PER YEAR.** T. N. S. I. M. & M. E., vol. 6, p. 109.
- See also **HAULAGE ON INCLINES.**
- COST OF ENGINE PLANE TRACK, ENGLAND, 1880-'83.** T. N. S. I. M. & M. E., vol. 6, p. 107. Table.
- COST OF TRACK LAYING IN AN ENTRY OF GIVEN LENGTH.** M. & M., vol. 19, p. 474. Table.

COST OF WOODEN AND METAL TRACK FOR MINES. E. & M. J., vol. 75, p. 331.

See also MINE ROADS AND TRACKS.

COST OF CHECK BLOCKS ON MINE HAULAGE TRACKS. T. N. S. I. M. & M. E., vol. 8, p. 205 also 206. Table.

COST OF MINE CARS. M. & M., vol. 25, p. 458. Table.

HAULAGE COST OF NEW HOUSE TUNNEL, IDAHO SPRINGS, COLORADO. M. & M., vol. 27, p. 73, also p. 74.

COST OF INSTALLATION AND OPERATION AT SEVERAL EUROPEAN TUNNELS. Min. & Sci. Press, vol. 48, pp. 322, 323. Tables.

TUNNEL ROYALTY (COMSTOCK). Min. & Sci. Press, vol. 62, p. 104. $\frac{1}{2}$ column.

Cost of Hoisting

COST OF HOISTING. E. & M. J., vol. 74, p. 407.

COST OF WINDING AT COLLIERIES. By W. C. Mountain. Min. Mag., vol. 13, p. 229. $7\frac{1}{2}$ columns.

COST OF HOISTING. The Witwatersrand Goldfields, p. 268. 3 pages.

COST OF HOISTING ORE IN QUEENSLAND. T. I. M. E., vol. 21, p. 390. Table.

COST OF HOISTING. T. I. M. & M., vol. 11, p. 147. Table.

ECONOMY IN RAISING AND LOWERING MEN IN MINES: Calculations. Min. & Sci. Press, vol. 18, p. 307. $\frac{1}{2}$ column.

ECONOMY IN WINDING ENGINES. E. & M. J., vol. 33, p. 132. $\frac{1}{2}$ column.

COMPARATIVE COST OF HOISTING BY THE CAGE-CAR AND TUB SYSTEMS IN TWO WISCONSIN ZINC MINES. Eng.-Cont., vol. 27, p. 105. 4 columns.

COST OF HOISTING IN THE WISCONSIN ZINC MINES. E. & M. J., vol. 83, p. 380. $1\frac{1}{2}$ columns.

COST OF HOISTING AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol. 8, p. 350. 1 page.

COSTS OF OPERATING HOISTS, JOPLIN DISTRICT, MISSOURI. Min. Mag., vol. 10, p. 263. 2 columns.

COST OF HOISTING ON THE RAND. Witwatersrand Goldfields, pp. 268 and 298. Tables.

COST OF HOISTING AT PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 97. Table.

COST OF HOISTING AT THE PORTLAND MINE. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, pp. 1305, 1326, 1327. Tables.

COST OF OPERATING A COMBINED GRAVITY AND POWER HOIST SYSTEM IN TENNESSEE. M. & M., vol. 19, p. 534.

COST OF VERTICAL AND INCLINED EQUIPMENT. T. I. M. & M., vol. 11, plate 79.

See also METHODS OF HOISTING.

COST OF ROPE PER TON ORE TREATED, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 456. Table.

COST OF DIFFERENT KINDS OF ROPE PER TON HOISTED. T. I. M. & M., vol. 11, p. 172. 1 page.

COST OF LANG LAY ROPES. T. I. M. E., vol. 30, p. 568. Table.

RELATIVE ECONOMY (COST) OF ALOE AND WIRE ROPES FOR MINES. E. & M. J., vol. 18, p. 100. $\frac{1}{2}$ column.

COST OF ROPE PER TON HOISTED. T. I. M. & M., vol. 11, p. 291.

See also ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPE.

COST OF ELECTRIC HOISTING IN THE ANTHRACITE FIELDS. E. & M. J., vol. 84, p. 886.

COST OF ELECTRIC WINDING ON THE CONTINENT. T. I. M. E., vol. 31, p. 281. Table.

COST OF ELECTRICAL WINDING. T. I. M. E., vol. 31, pp. 333, 334, 335, 336, 337, 338, 339, 341, 342, 343, 344, 345, 346, 347.

COST OF INSTALLATION AND EXPENSE OF OPERATING ELECTRICAL HOISTS. E. & M. J., vol. 83, p. 898. 5 columns.

See also ELECTRIC HOISTING.

COST OF AIR LIFT (HOIST). Min. & Sci. Press, vol. 73, p. 30. Table.

COST OF PNEUMATIC SYSTEM OF HOISTING. T. A. I. M. E., vol. 19, p. 120.

See also PNEUMATIC HOISTING.

Cost of Hydraulic Mining

COST OF HYDRAULIC MINING. Sch. Mines Quart., vol. 3, p. 89. Table.

COST OF HYDRAULIC SLUICING IN AUSTRALIA. T. A. I. M. E., vol. 12, pp. 38, 39, 40 and 41.

COST OF TIN SLUICING IN TASMANIA. M. & M., vol. 31, p. 314. Table.

METHODS AND COSTS OF GRAVEL AND PLACER MINING IN ALASKA. By C. W. Purington. U. S. G. S., Bull. 259, p. 32. 14½ pages.

COST OF WORKING FROZEN GRAVEL IN ALASKA. T. I. M. & M., vol. 9, p. 186. ½ page.

AVERAGE COST OF MINING ON THE YUKON. J. C. M. I., vol. 11, p. 549. ½ page.

COST OF WORKING AURIFEROUS GRAVEL IN ALASKA AND THE KLONDIKE. Min. Mag., Jan., 1905, pp. 17, 20.

GRAVEL-MINING COSTS IN ALASKA AND NORTHWEST CANADA. By C. W. Purington. E. & M. J., Feb. 9, 1905, p. 269. 5½ columns.

COST OF HYDRAULIC MINING IN CANADA. Min. & Sci. Press, vol. 42, p. 136. ¾ column.

COST OF MINING AND MILLING ALLUVIAL DEPOSITS, BRITISH COLUMBIA. Min. & Sci. Press, vol. 87, p. 305.

COST OF WORKING ALLUVIAL DEPOSITS ON THE RAND. T. N. S. I. M. & M. E., vol. 10, p. 145. Table.

COST AND PROFIT OF ALLUVIAL MINING IN OTAGO, NEW ZEALAND. T. A. I. M. E., vol. 21, pp. 451, 468, 469.

See also HYDRAULIC MINING.

Cost of Labor

MINER'S WAGES. Min. & Sci. Press, vol. 33, p. 410, ¼ column; vol. 34, p. 88, ¼ column.

REDUCTION OF MINER'S WAGES. Min. & Sci. Press, vol. 34, p. 118. 1½ columns.

THE MINER'S WAGES QUESTION. Min. & Sci. Press, vol. 34, p. 136, ¼ column; p. 152, ¼ column.

FORCE ACCOUNT COSTS. Min. & Sci. Press, vol. 101, p. 638. 1½ columns. Tables.

METHODS OF PAYING MINER'S WAGES. By J. Daniels. E. & M. J., vol. 84, p. 358. 3½ columns.

LABOR COST FOR A CROSSING AND INCLINE. T. N. S. I. M. & M. E., vol. 6, p. 198. Table.

LABOR COST FOR AN INCLINE. T. N. S. I. M. & M. E., vol. 6, p. 196. Table.

"MINERS' WAGES IN MEXICO." Min. & Sci. Press, vol. 85, p. 73. 1½ columns.

INCREASED COST OF LABOR AND MATERIAL. E. & M. J., vol. 82, p. 627. ¾ column.

THE HOMESTEAD COMPROMISE WAGE SCALE, AND COMPUTED WAGE EARNINGS. E. & M. J., vol. 48, p. 48. 1½ columns.

MINER'S WAGES AND LOW GRADE ORES. Min. & Sci. Press, vol. 42, p. 134. 2½ columns.

LABOR AND TONNAGE CHART AS AIDS IN REDUCING COSTS. By C. T. Rice. E. & M. J., vol. 90, p. 754. 5 columns. D.

COST OF LABOR ON THE RAND. By E. P. Rathbone. Min. & Sci. Press, vol. 94, p. 466. 2 columns.

- COST OF LABOR ON THE RAND. Gold Mines of the Rand, p. 252. 6 pages.
- COST OF LABOR ON THE RAND. P. C. M. & M. Soc. S. A., vol. 9, p. 225. 3 columns.
- LABOR COSTS ON THE RAND. Witwatersrand Goldfields, p. 449. Table.
- LABOR COST IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 299. 1 column.
- LABOR COSTS AT THE KIMBERLEY MINES. T. N. S. I. M. & M. E., vol. 10, p. 105.
- LABOR COST ON THE RAND. T. N. S. I. M. & M. E., vol. 10, p. 137.
- SCHEDULE OF PRICES OF LABOR PER SHIFT, THE RAND MINES. T. A. I. M. E., vol. 39, p. 429. Table.
- COST OF LABOR, TIMBER AND HAULAGE AT THE TURKEY HEAVEN GOLD DISTRICT, ALABAMA. E. & M. J., vol. 55, p. 486.
- LABOR COSTS IN THE ALABAMA AND GEORGIA GOLDFIELDS. T. A. I. M. E., vol. 26, p. 472. Table.
- LABOR COST IN TUNNELING IN THE ALABAMA GOLDFIELDS. E. & M. J., vol. 55, p. 486.
- LABOR COST AT BRILLIANT COAL MINES, ALABAMA (1906). T. A. I. M. E., vol. 37, p. 490. 1 page.
- LABOR COST ON THE YUKON IN 1896. U. S. G. S., 18th Ann. Rept., pt. 3, p. 387.
- COST OF LABOR AT BISBEE COPPER MINES, ARIZONA. M. & M., vol. 27, p. 293. $\frac{1}{2}$ column.
- LABOR COST IN THE DEEP ALLUVIAL WORKINGS, AUSTRALIA. T. I. M. & M., vol. 7, p. 114. Table.
- COST OF LABOR IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 455, 457, 460, 461, 464, 465, 606. Tables.
- COST OF LABOR PER TON ORE AT THE GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 616. Table.
- LABOR COST AND DISTRIBUTION IN MILLING, AUSTRALIA. P. C. M. & M. Soc. S. A., vol. 8, p. 239. 1 column.
- LABOR COSTS IN WESTERN AUSTRALIA. M. & M., vol. 25, p. 42. Table.
- COAL MINERS' WAGES IN BOHEMIA. Min. & Sci. Press, vol. 87, p. 154. Table.
- WAGE SCALE AT COBALT. M. & M., vol. 27, p. 488.
- WAGE SCALE ROSSLAND, BRITISH COLUMBIA. Min. & Sci. Press, vol. 90, p. 140. Table.
- LABOR COSTS IN MINES OF NOVA SCOTIA. Min. & Sci. Press, vol. 91, p. 290.
- LABOR COST IN A CALIFORNIA GOLD MINE. Ore Dressing, Richards, vol. 2, p. 1131. Table.
- WORK AND WAGES IN CALIFORNIA. Min. & Sci. Press, vol. 30, p. 114. $5\frac{1}{2}$ columns.
- CALIFORNIA AND NEVADA MINING WAGES. E. & M. J., vol. 83, p. 846. $\frac{1}{2}$ column.
- LABOR COST AT OROVILLE, CALIFORNIA. E. & M. J., vol. 78, p. 909. Table.
- LABOR COST IN NOVA SCOTIA. Min. & Sci. Press, vol. 91, p. 290.
- LABOR COSTS AT ALMADEN. Min. & Sci. Press, vol. 37, p. 392. Tables.
- LABOR COSTS AT CAMP BIRD MINE. Sch. Mines Quart., vol. 24, p. 64. Table.
- LABOR COST AT CAMP BIRD MINE, OURAY, COLORADO. T. A. I. M. E., vol. 33, p. 526. Table.
- COMPARATIVE RATES FOR LABOR AT THE MINES OF BOULDER AND CRIPPLE CREEK, COLORADO. T. I. M. E., vol. 19, p. 334.
- LABOR COST AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb. 1906, pp. 1326, 1327. Tables.
- FORMER RATES OF WAGES IN ENGLAND. Coll. Working and Management, p. 34. 10 pages. Table.

- PRESENT WAGES IN ENGLISH COAL MINES. Coll. Working and Management, p. 43.
- LABOR COST AT WARDNER, IDAHO. Rept. Zinc Comm., Canada, p. 43.
- LABOR COSTS IN A STAMP MILL IN IDAHO. Ore Dressing, Richards, vol. 2, p. 112. Table.
- LABOR COST IN NORTHERN IDAHO. Ore Dressing, Richards, vol. 2, p. 1130. Table.
- LABOR COSTS IN THE MALAY PENINSULA TIN MINES. Tin Deposits of the World, pp. 59 and 64. Table.
- LABOR COST IN TIN MINES OF SPAIN. Tin Deposits of the World, p. 151. Table.
- LABOR COSTS IN DRESSING TIN ORES AT MOUNT BISCHOFF. Tin Deposits of the World, p. 172.
- WAGE SCALE IN THE JOPLIN REGION. M. & M., vol. 28, p. 156. Table.
- LABOR COSTS, MISSOURI LEAD AND ZINC MINES. Ore Dressing, Richards, vol. 2, p. 1129. Table.
- LABOR COSTS IN THE LEAD AND ZINC MINES OF THE JOPLIN DISTRICT. Univ. Geol. Sur. of Kans., vol. 8, pp. 350, 377, etc. Table.
- LABOR COSTS IN THE JOPLIN DISTRICT, MISSOURI. E. & M. J., vol. 84, p. 1119. $\frac{1}{2}$ column.
- COST OF LAKE SUPERIOR AND MONTANA COPPER. By J. R. Finlay. E. & M. J., vol. 85, p. 856. 13 $\frac{1}{2}$ columns.
- LABOR COSTS AT THE BALTIC MILL, LAKE SUPERIOR. T. I. M. & M., vol. 14, p. 193. Table.
- WAGE SCALE IN MONTANA COAL MINES. M. & M., vol. 27, p. 484. Table.
- LABOR COSTS IN COAL MINES OF MONTANA, 1908. E. & M. J., vol. 85, p. 1058. 1 column. Table.
- COST OF MINE LABOR, BUTTE, MONTANA. M. & M., vol. 21, p. 158. Table.
- COST OF MINE LABOR, ROSSLAND, BRITISH COLUMBIA. M. & M., vol. 21, p. 367. Table.
- COST OF HAULAGE SYSTEM EMPLOYED AT THE COTTONWOOD MINE, MONTANA. M. & M., vol. 19, p. 276. Table.
- LABOR COST AT THE NEW SODDY COAL COMPANY, TENNESSEE HAULAGE SYSTEM. M. & M., vol. 19, pp. 534, 535.
- LABOR COST, KELLY, NEW MEXICO. M. & M., vol. 27, p. 52.
- COST OF LABOR IN THE NEW YORK HEMATITE MINES. E. & M. J., vol. 82, p. 555. $\frac{1}{2}$ column.
- COST OF LABOR AND SUPPLIES IN DRIVING DRIFT AT GOLDFIELD. E. & M. J., vol. 90, p. 1246. 1 column. Table.
- LABOR COSTS AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 437. Table.
- WAGE SCALE AT TONAPAH, 1906. E. & M. J., vol. 82, p. 247. $\frac{1}{2}$ column.
- LABOR COSTS IN EASTERN OREGON. M. & M., vol. 19, p. 15.
- HOW COLLIERIES WERE PAID BY OUR GREAT-GRAND-FATHERS. Coll. Eng., vol. 8, p. 68. $\frac{1}{2}$ column.
- COST OF HOUSE RENT TO MINERS IN THE ANTHRACITE COAL FIELDS OF PENNSYLVANIA: Basis of Fixing Charge. The Anthracite Coal Industry, Roberts, p. 130. 4 pages.
- LABOR COSTS: Wages in the Anthracite Coal Fields. The Anthracite Coal Industry, Roberts, p. 108. 20 pages.
- THE COST OF LIVING: Anthracite Coal Miners. E. & M. J., vol. 74, p. 709.
- LABOR COSTS IN PENNSYLVANIA MINES. Rept. Insp. Mines, Pa., 1878, p. 232, 253, 254, 255, 256, 257; 1879, pp. 324, 325 and 1880, pp. 248, 249. Tables.
- LABOR COSTS IN THE IRON MINES OF SCANDINAVIA. T. I. M. & M., vol. 13, p. 500. Table.

COST: Wages Earned Per Day at Cabezas del Pasto Mine, Spain. T. A. I. M. E., vol. 21, p. 101.

LABOR COST PER TON COAL, MONTANA. M. & M., vol. 19, p. 276. Table.

LABOR COSTS AT THE REDJANG LEBONG MINE, SUMATRA. T. I. M. & M., vol. 16, p. 46. Table.

WAGE SCALE AT BINGHAM, UTAH. M. & M., vol. 28, p. 108.

WAGE SCALE AT THE DALY-JUDGE MINE, UTAH. M. & M., vol. 28, p. 35. Table.

LABOR COSTS IN VENEZUELA. T. I. M. & M., vol. 9, p. 108. Table.

LABOR COSTS IN WISCONSIN ZINC FIELDS. E. & M. J., vol. 81, p. 1235.

COST OF FEEDING COOLIES AND KAFFIRS. T. A. I. M. E., vol. 39, p. 569. 3 pages.

THE COST OF LIVING AT JOHANNESBURG. By T. L. Carter. E. & M. J., vol. 75, p. 895. 1½ columns.

WAGES OF MINERS ON THE CONTINENT. E. & M. J., vol. 51, p. 445.

THE COST OF LIVING. Min. & Sci. Press, vol. 93, p. 333. ¼ column.

LABOR COSTS OF THE MOUNT WOOD AND TOP MILL TUNNELS. J. W. Soc. E., vol. 2, pp. 60, 61. Tables.

COST OF LABOR IN DRIFT MINING. Min. & Sci. Press, vol. 68, p. 165. ¼ column.

See also **LABOR IN MINES, AND MINER'S WAGES.**

Cost of Lighting

COST OF ILLUMINATION IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 185. 1 page.

COST OF CANDLES, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 454, 456, 461, 462. Table.

COST OF LIGHTING BY CANDLES. Miner's Pocket Book, Lock, p. 344. Table.

COST OF CANDLES ON THE RAND, 1902. Witwatersrand Goldfields, p. 458. Table.

PROPER ALLOWANCE OF CANDLES PER SHIFT. Min. & Sci. Press, vol. 85, p. 202.

COST OF CANDLES. Min. & Sci. Press, vol. 85, pp. 264 and 292.

See also **CANDLES, ETC.**

COST OF LIGHTING BY ELECTRICITY. Miner's Pocket Book, Lock, p. 342. 2 pages.

COMPARATIVE COSTS OF ILLUMINANTS: Electricity, Gas and Paraffin. T. N. S. I. M. & M. E., vol. 10, p. 32. Table.

COST OF USE OF SUSSMANN ELECTRIC MINER'S LAMP. T. I. M. E., vol. 21, p. 193. Table.

COST OF MAINTAINING EACH ARC LAMP IN NEW YORK CITY HAS BEEN FIGURED TO BE \$168.94; OF EACH INCANDESCENT LAMP \$29.00 PER YEAR. E. & M. J., vol. 79, p. 489.

COST OF INSTALLATION, OPERATION, AND MAINTENANCE OF AN ELECTRIC LIGHTING PLANT FOR A MINE. Coll. Engr., vol. 9, p. 162. Tables.

COST OF LIGHTING A FACTORY WITH INCANDESCENT LAMPS, COMPARED WITH GAS. E. & M. J., vol. 38, p. 380.

See also **ELECTRICITY FOR MINE LIGHTING.**

COST OF OPERATING ACETYLENE MINE LAMPS. E. & M. J., vol. 72, p. 466.

COST OF ACETYLENE LIGHT FOR MINES. E. & M. J., vol. 83, p. 95.

See also **ACETYLENE GAS FOR MINES.**

Cost of Maintenance and Depreciation

DEPRECIATION OF MINING PLANTS. Min. & Sci. Press, vol. 89, p. 187. 1½ columns.

See also **AMORTIZATION AND DEPRECIATION.**

Cost of Metallurgical Treatment

COST OF METALLURGICAL WORKS. By W. R. Ingalls. E. & M. J., vol. 90, p. 14. 3 columns.

- THE NEW SMELTING RATES IN COLORADO. E. & M. J., vol. 64, p. 696. 1 column.
- SMELTER RATES FOR WESTERN ORES: Gold, Silver, Copper and Lead. M. & M., vol. 27, p. 220. 1 column.
- SMELTING RATES CLEAR CREEK VALLEY MINES, COLORADO, 1905. Min. & Sci. Press, vol. 91, p. 13. Tables.
- SMELTING RATES IN NEVADA. E. & M. J., vol. 82, p. 1079. $\frac{1}{2}$ column.
- SMELTING RATES ON ORE FROM EUREKA, NEVADA. E. & M. J., vol. 85, p. 1143. $\frac{1}{2}$ column.
- SMELTING RATES IN MEXICO. By T. Chase. E. & M. J., vol. 89, p. 270. $1\frac{1}{2}$ columns.
- SMELTING CHARGES. Min. & Sci. Press, vol. 84, p. 331. $1\frac{1}{2}$ columns.
- SMELTER CHARGES AND MINE PROFITS. Min. & Sci. Press, vol. 84, p. 344, 2 columns; vol. 85, p. 87, 1 column.
- SINGAPORE SMELTING-CHARGES. T. A. I. M. E., vol. 20, p. 80.
- PAYING BY "UNIT" SMELTER PRACTICE. Min. & Sci. Press, vol. 82, p. 259.
- SMELTER METHODS IN COLORADO: Charges. Min. & Sci. Press, vol. 81, pp. 9 and 463.
- SMELTER CHARGE HANDLING IN THE SOUTHWEST. By R. B. Brinsmade. M. & M., vol. 27, p. 272. 6 columns.
- COST OF SMELTING SILVER ORE PER TON IN MEXICO. T. I. M. & M., vol. 8, p. 277.
- COST OF THE "DIEHL" PROCESS. T. I. M. & M., vol. 12, pp. 13, 15, 17, 20, 22, 23.
- THE RIECKEN PROCESS IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 386. 5 pages.
- COST OF THE RIECKEN PROCESS IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 390. Tables.
- See also METALLURGICAL PROCESSES, THEORY, ETC.
- COST OF PLANT AND TREATMENT BY THE GREENAWALT ELECTROLYTIC PROCESS. E. & M. J., vol. 90, p. 1066. Tables.
- See also ELECTRO-METALLURGY.
- COST OF TREATMENT OF SULPHIDE ORE BY PHOENIX PROCESS. T. I. M. & M., vol. 9, p. 396. 2 pages.
- RELATIVE COST OF BRIMSTONE AND PYRITES FOR ACID MAKING. E. & M. J., vol. 37, p. 314. 1 column.
- THE COST OF SMELTING COPPER ORE. By G. F. Beardsley. E. & M. J., vol. 82, p. 397. $2\frac{1}{2}$ columns.
- COST OF TREATMENT OF LOW-GRADE COPPER ORES. T. I. M. E., vol. 26, p. 43. Table.
- APPROXIMATE COST OF PRODUCING COPPER FROM ONE AND TWO FURNACES, IN ARIZONA. Sch. Mines Quart., vol. 6, p. 373. Tables.
- CALCULATIONS OF COST OF REFINING COPPER ELECTROLYTICALLY. Min. & Sci. Press, vol. 87, p. 254. $\frac{1}{2}$ column.
- COST OF ELECTROLYTIC COPPER REFINING. E. & M. J., vol. 76, p. 740. Table.
- COST OF COPPER, LAKE SUPERIOR. E. & M. J., vol. 43, p. 307. 2 columns.
- COST PER TON OF COPPER MATTE CONVERTING. E. & M. J., vol. 90, p. 464. Table.
- COST AND PROFITS IN PYRITIC SMELTING OF LOW-GRADE COPPER ORES. By F. H. Prentiss. Min. & Sci. Press, vol. 84, p. 255, 2 columns; p. 268, $3\frac{1}{2}$ columns; p. 282, $4\frac{1}{2}$ columns, I.; p. 295, $3\frac{1}{2}$ columns, I.; p. 308, $3\frac{1}{2}$ columns, I.; p. 323, $4\frac{1}{2}$ columns, I.; p. 333, $2\frac{1}{2}$ columns, I.
- COST OF REFINING PIG COPPER. T. A. I. M. E., vol. 10, p. 53.
- COST OF PRODUCTION OF FINE COPPER. E. & M. J., vol. 51, p. 347. $\frac{1}{2}$ column.

COST OF COPPER IN LAKE SUPERIOR.
E. & M. J., vol. 38, p. 374. 2 columns.

See also **REFINING OF COPPER.**

COST OF SMELTING COPPER ORES. T. A. I. M. E., vol. 15, p. 65.

COSTS OF SMELTING ORE PER TON, CANANEA. E. & M. J., vol. 89, p. 315. Table.

COSTS OF LAKE SUPERIOR SMELTING.
By L. S. Austin. Min. & Sci. Press, vol. 98, p. 392. $3\frac{1}{2}$ columns. Tables.

COST OF REFINING LAKE SUPERIOR COPPER. E. & M. J., vol. 74, p. 370. $\frac{1}{2}$ column.

COST OF COPPER SMELTING IN NORWAY. E. & M. J., vol. 74, p. 377.
See also **METALLURGY OF COPPER.**

COST OF LEACHING COPPER ORES IN THE URALS. T. I. M. & M., vol. 19, p. 230, Tables; pp. 259 and 260, Tables.

COMPARATIVE COSTS OF SMELTING AND CYANIDING ORES IN WESTERN AUSTRALIA. Min. Mag., vol. 11, p. 449.

SMELTING COST AT MINE LE ROI, BRITISH COLUMBIA. E. & M. J., vol. 88, p. 104. $1\frac{1}{2}$ columns. Table.

COST OF TREATING THE DRY ORES OF THE SLOCAN. J. C. M. I., vol. 7, pp. 204, 205, 206.

COST OF TREATMENT AT KALGOORLIE: Roasting and Filterpress Work. E. & M. J., vol. 76, p. 352. Table.

COST OF PRECIPITATION OF METALS. T. A. I. M. E., vol. 20, pp. 33, 34, 35.

COST OF PRECIPITATION AND MELTING, MINAS DEL TAJO, CYANIDE PLANT, SINALOA. E. & M. J., vol. 89, p. 569. Table.

See also **CYANIDING GOLD, ETC.**

COST OF CHEMICALS AND TREATMENT BY CHLORINATION IN COLORADO. E. & M. J., vol. 78, p. 670. Table.

COST OF CHLORINE SMELTING. Min. & Sci. Press, vol. 87, p. 352.

See also **THE CHLORINATION PROCESS.**

COST OF STEEL MAKING IN ALABAMA. E. & M. J., vol. 46, pp. 84 and 125; vol. 47, p. 214.

COST OF PRODUCING ONE GROSS TON OF COKE PIG-IRON. T. A. I. M. E., vol. 16, p. 200.

COST OF PRODUCING PIG IRON IN THE UNITED STATES. By W. B. Phillips. E. & M. J., vol. 72, p. 267. 4 pages.

COST OF MAKING CHARCOAL IRON IN TEXAS. P. E. Soc. W. Pa., vol. 18, p. 65. Table.

COST OF PRODUCING ONE GROSS TON OF ANTHRACITE PIG-IRON. T. A. I. M. E., vol. 16, p. 200.

COST OF PRODUCING ONE GROSS TON OF CHARCOAL PIG-IRON. T. A. I. M. E., vol. 16, p. 199.

APPROXIMATE COST OF PIG-IRON PRODUCED AT DULUTH, CLEVELAND AND CHICAGO. T. A. I. M. E., vol. 16, p. 201.

CLASSES AND PRICES OF LAKE IRON ORES. E. & M. J., vol. 75, p. 373. $\frac{1}{2}$ column.

COST OF PIG IRON MADE FROM LAKE SUPERIOR ORES. By J. R. Finlay. E. & M. J., vol. 87, p. 739. $17\frac{1}{2}$ columns.

COST OF ELECTRIC SMELTING OF IRON ORES. E. & M. J., vol. 82, p. 25. Table.

See also **METALLURGY OF IRON AND STEEL.**

COST OF EXTRACTION OF MERCURY AT ALMADEN. Min. & Sci. Press, vol. 38, p. 38. $1\frac{1}{2}$ columns.

COST OF TREATMENT OF QUICKSILVER IN THE GUADALCAZAR DISTRICT, MEXICO. T. I. M. & M., vol. 4, p. 143.

See also **METALLURGY OF QUICKSILVER.**

COST OF SILVER SMELTING IN MEXICO. Min. & Sci. Press, vol. 81, p. 285. Table.

COST OF SMELTING AT SIERRA MOJADA, MEXICO. T. A. I. M. E., vol. 15, pp. 559 and 562.

See also METALLURGY OF GOLD AND SILVER.

COST OF ZINC SMELTING. E. & M. J., vol. 83, p. 1248.

COST OF SMELTING ZINC ORES. Rept. Zinc. Comm., Canada, p. 28. 5 pages.

COST OF ELECTROLYTIC PLANT AND ELECTROLYSIS IN HOEFPNER ZINC PROCESS. E. & M. J., vol. 75, p. 752.

COSTS IN ZINC SMELTING. M. & M., vol. 19, p. 104. Tables.

COST OF PLANT AND OPERATION IN THE HOEFPNER ZINC PROCESS: Electrolytic. E. & M. J., vol. 75, p. 751.

COST OF SMELTING AT JOPLIN, MISSOURI. E. & M. J., vol. 84, p. 863. Tables.

See also METALLURGY OF ZINC.

COST OF LEAD PRODUCTION IN THE SCOTCH HEARTH. E. & M. J., vol. 80, p. 11.

COST OF LEAD SMELTING IN THE UNITED STATES. E. & M. J., vol. 74, p. 208. 1 column.

COST OF LEAD SMELTING BY THE HUNTINGTON-HEBERLEIN PROCESS. E. & M. J., vol. 80, pp. 535, 537, 538. Table.

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THE COST OF SILVER-LEAD SMELTING. By W. R. Ingalls. E. & M. J., vol. 86, p. 315. 19 columns.

THE COST OF SILVER-LEAD SMELTING. E. & M. J., vol. 86, p. 585. 5 columns.

SMELTING RATES ON SILVER-LEAD ORES. Rept. Zinc. Comm., Canada, p. 72. 2 pages.

COST OF RUNNING OR OPERATING BARTLETT BAG-PROCESS FOR COLLECTING LEAD-FUMES. T. A. I. M. E., vol. 18, p. 698.

See also METALLURGY OF LEAD.

COST OF EXTRACTION OF SULPHUR. E. & M. J., vol. 37, p. 235. Table.

COST OF EXTRACTION OF SULPHUR. Min. & Sci. Press, vol. 48, p. 350. Table.

COST OF SMELTING SILICIOUS ORES, MEXICO. Min. & Sci. Press, vol. 83, p. 5. Table.

PROFITS OF SMELTING IN UTAH. Min. & Sci. Press, vol. 35, p. 22. 1 column.

EUREKA AND UTAH COMPARED. Min. & Sci. Press, vol. 35, p. 66. $\frac{1}{2}$ column.

COST OF SMELTING THE SILICIOUS ORES OF THE BLACK HILLS. E. & M. J., vol. 69, p. 228.

SMELTER CHARGES AT DENVER AND SALT LAKE CITY. M. & M., vol. 22, p. 204. Table.

COST OF SMELTING IN REVERBERATORY FURNACES. Min. & Sci. Press, vol. 89, p. 36.

COST OF DISPOSAL OF BULLION. Gold Min. & Mill., W. Aus., p. 466. 4 pages.

COST OF REFINING AND SHIPPING CRUDE BULLION. Min. & Sci. Press, vol. 36, p. 93. $\frac{1}{2}$ column.

See also REFINING GOLD AND SILVER, REFINING OF COPPER, and METALLURGY OF LEAD.

COST OF CALCINING WITH THE MERTON FURNACE, AT KALGOORLIE. E. & M. J., vol. 76, p. 776.

THE COST OF ROASTING ORES. E. & M. J., vol. 56, p. 666. 2 columns.

COST OF ROASTING ORE. T. A. I. M. E., vol. 10, p. 34.

COST OF ROASTING PER TON WITH THE BROWN ROASTER. E. & M. J., vol. 62, p. 9.

COST OF ROASTING AND HANDLING ORE. T. A. I. M. E., vol. 19, p. 294.

COST OF ROASTING CONCENTRATES. T. A. I. M. E., vol. 17, p. 318.

COST OF ROASTING ORE IN COLORADO. E. & M. J., vol. 78, p. 669. Table.

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Cost of Mine Examination

THE VALUE OF ADVICE: Fees. Min. & Sci. Press, vol. 88, p. 326. $\frac{1}{4}$ column.

THE COST OF TESTING A MINE. Min. & Sci. Press, vol. 81, p. 125. $\frac{1}{4}$ column.

See also VALUE OF MINES, ETC.

Cost of Mine and Mill Construction

COST OF CRIB CONSTRUCTION: Brief Method for Preparing Estimates. By G. A. M. Liljencrantz. J. W. Soc. E., vol. 4, p. 361. 10 pages.

COST OF SHOP DRAWINGS. M. & M., Dec., 1901, p. 197. $\frac{1}{4}$ column.

COST OF CONSTRUCTION MADE OF HOLLOW CONCRETE BLOCKS. E. & M. J., vol. 80, p. 50.

COST OF CONCRETE IN BUILDING CONSTRUCTION. E. & M. J., vol. 76, p. 623.

COST OF CONSTRUCTING A LARGE SHOP BUILDING WITH REINFORCED CONCRETE WALLS AND STEEL ROOF TRUSSES. Eng.-Cont., vol. 27, p. 88. 7 columns. I.

COST OF MILL CONSTRUCTION IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1206. $\frac{1}{4}$ column.

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COST OF ERECTING BUILDINGS PER TON. E. & M. J., vol. 81, pp. 140 and 313. 2 columns.

COST OF BLACKSMITH SHOP AND TOOLS, COMPLETE. M. & M., vol. 25, p. 458. Table.

COST OF MINING PLANT OF 2200 TONS CAPACITY. T. I. M. & M., vol. 7, p. 147. Table.

COST OF CYANIDE PLANT AND ERECTION. T. I. M. & M., vol. 7, p. 148. Table.

COST OF MILL CONSTRUCTION IN RHODESIA. Min. Mag., vol. 13, p. 11. Tables.

DETAILED COST OF MILL CONSTRUCTION. Ore Dressing, Richards, vol. 2, p. 1125. Table.

COST OF CONCRETE VS. BRICK BUILDINGS. E. & M. J., vol. 80, p. 50.

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COST OF GOLD-MILL CONSTRUCTION. T. A. I. M. E., vol. 10, p. 99.

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COST OF CORRUGATED IRON ROOFING. Mill Building Construction, p. 25. Table.

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COST OF ROOF COVERINGS. E. & M. J., vol. 76, pp. 356, 357. Tables.

COST OF TIPPLE, COMPLETE. M. & M., vol. 25, p. 458. Table.

COST OF TIPPLE AND HEAD FRAME. E. & M. J., vol. 74, p. 407.

COAL TIPPLES: Design and Cost, with Bill of Materials. M. & M., Oct., 1901, p. 139.

APPROXIMATE COST OF HEAD FRAMES AND TIPPLES. E. & M. J., July 14, 1904, p. 64. Table.

COST OF HEAD-FRAMES AND TIPPLES. E. & M. J., vol. 79, p. 766.

See also TIPPLES, ETC.

COST OF STEEL HEAD-FRAME AND BINS AT GWIN MINE. Min. & Sci. Press, vol. 88, p. 5. $\frac{1}{4}$ column.

See also HEADFRAMES, ETC.

COST OF BITUMINOUS COAL BREAKER AND COST OF OPERATIONS. T. A. I. M. E., vol. 35, p. 39. Tables.

COST OF THE PACIFIC COAL COMPANY'S BREAKER AT ALBERTA, CAN-

- ADA. E. & M. J., vol. 83, p. 861. Table.
- COST OF LARGE COAL BREAKER IN CANADA. E. & M. J., vol. 82, p. 1023.
- COST OF BREAKER CONSTRUCTION AND OPERATION. E. & M. J., Apr. 7, 1904.
- See also TIPPLES, ETC.
- COST OF GOLD DREDGE CONSTRUCTION. Cal. Miners' Assoc., Ann., 1906, p. 109. 1 page.
- COST OF ERECTING CONCRETE MORTAR BLOCKS. T. I. M. & M., vol. 18, p. 35. Table.
- COST OF CONCRETE BLOCK MOULDING. Eng.-Cont., vol. 27, p. 99. Table.
- COST OF CONCRETE BLOCK LAYING. Eng.-Cont., vol. 27, p. 99.
- COST OF MIXING AND PLACING CONCRETE. J. W. Soc. E., vol. 2, p. 346. Table.
- COST OF MINE EQUIPMENT. Min. & Sci. Press, vol. 90, p. 351. 1 column.
- COST OF PORTLAND CEMENT PER BARREL. U. S. G. S., Bull. 315, p. 244. Table.
- COST OF MOULDING CONCRETE CULVERT PIPE. Eng.-Cont., vol. 27, p. 68. Table.
- COST OF THE CONCRETE FOUNDATIONS OF THE GOLDFIELD CONSOLIDATED MILL. E. & M. J., vol. 87, p. 1175. 1 column.
- COST OF CONCRETE STAMP FOUNDATIONS. Min. & Sci. Press, vol. 94, p. 632.
- See also FOUNDATIONS FOR BUILDINGS, ETC.
- COST OF BUILDING A CONCRETE TANK. Min. & Sci. Press, vol. 92, p. 146. Table.
- See also TANK FOR MINE PURPOSES.
- COST OF CONSTRUCTING SHAFT ORE-BINS IN WEST AUSTRALIA. Min. & Sci. Press, vol. 90, p. 170. Table.
- See also ORE BINS, ETC.
- COST OF LINING THE LOS ANGELES TUNNEL: Concrete Work. Min. & Sci. Press, vol. 100, p. 682. 1 column.
- See also TUNNEL SUPPORT.
- COST OF ERECTING A 30-STAMP BATTERY. E. & M. J., vol. 37, p. 461. Tables.
- COST OF ERECTING TWO-SETS OF KROM 26-INCH ROLLS. E. & M. J., vol. 37, p. 461.
- COST OF ERECTING A 30-STAMP BATTERY. Min. & Sci. Press, vol. 51, p. 86. $\frac{1}{4}$ column.
- See also STAMP MILL PRACTICE.
- COST OF CONCRETE MINE BARNs IN THE ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 35. Tables.
- APPROXIMATE COST OF COLLIERY STABLE. E. & M. J., vol. 81, p. 745. Table.
- COST OF TIMBER AT ALABAMA GOLD MINES. E. & M. J., vol. 55, p. 486.
- COST OF SUPPLIES IN WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., pp. 453, 454, 456, 457, 460, 462, 463. Tables.
- COST OF MATERIAL IN DRIFT MINING. Min. & Sci. Press, vol. 68, p. 165. $\frac{1}{4}$ column.
- COST OF SUPPLIES AND MATERIALS FOR MINES AND QUARRIES OF THE UNITED STATES. Rept. Census Office, Mines and Quarries, 1902, p. 114.
- See also QUARRYING METHODS.
- COST OF MATERIALS USED IN THE CONSTRUCTION OF FLUMES, PIPE LINES, CULVERTS, ETC. Notes on the Water Supply in New Countries, pp. 34 and 35. Table.
- See also COST OF FLUME CONSTRUCTION.
- COST OF REPAIRS FOR WOOD VS. IRON COAL CARS. E. & M. J., vol. 83, p. 626.
- See also MINE CARS, ETC.
- COST OF HAND VS. PNEUMATIC (HAMMER) RIVETING. Am. Engr. & R. R. Jour., vol. 74, p. 386. Table.

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- COST OF RIVETING STEEL VATS IN THE FIELD.** Gold Min. & Mill., W. Aus., p. 254.
- COST OF RIVETING.** E. & M. J., vol. 80, p. 1220.
- COST OF REFITTING OLD BOILER TUBES FOR OTHER SERVICE.** M. & M., vol. 25, p. 545. Table.
- DIFFERENCE IN COSTS FOR EQUIPPING AND OPERATING SHAFTS AND SLOPES IN FLAT COAL SEAMS:** Cost of Rock Work; Tipple; Head-frame for Shafts and Trestle for Slopes; Grading at Foot of Shaft or Slope; of Hoisting or Haulage Machinery; Mine Haulage; and Rounding off Vertical Curves, Etc. E. & M. J., vol. 74, p. 407.
- COST OF STEEL AND WOOD IN MINE SHAFTS.** Min. & Sci. Press, vol. 85, p. 323. 2½ columns.
- COST OF SHAFT GUIDES:** Oak, Vignol Rails, I-beams, T-iron, Etc., also Cost of Repairs. Min. Mag., vol. 13, p. 227. ½ column.
- COST OF CAGE GUIDES:** Wood and Steel. T. I. M. E., vol. 33, pp. 110, 111, 112, 118. Tables.
- COST OF CONCRETE-LINING TO BRIER HILL SHAFT.** T. L. S. M. I., vol. 14, p. 145. Table.
- See also **USE OF CONCRETE IN MINES, and SHAFT LINING.**
- Cost of Mining**
- COST OF MINING.** T. A. I. M. E., vol. 10, p. 28.
- GENERAL MINING COSTS.** M. & M., vol. 21, p. 159. Table.
- PROFITS AND LOSSES OF TWO METHODS OF MINING.** Min. & Sci. Press, vol. 19, p. 344. 1 column.
- THE CHEAPEST MINING.** Min. & Sci. Press, vol. 88, p. 313. 1½ columns.
- COST OF MINING.** By J. R. Finlay. E. & M. J., Feb. 23, 1905, p. 381. 3½ columns.
- COST OF MINING PER TON HOISTED:** Pyrites, Virginia. E. & M. J., vol. 80, p. 433. Tables.
- COSTS AND PRICES OF MINING OPERATIONS IN MEXICO.** T. I. M. & M., vol. 6, p. 135.
- COST OF MINING OPERATIONS IN BURMA:** Driving Adits, Shafts, Milling and Total Costs. T. F. I. M. E., vol. 12, p. 511.
- OLD TIME ARIZONA PRICES.** Min. & Sci. Press, vol. 71, p. 121. ¼ column. Table.
- VARIATIONS IN MINING COSTS.** By J. R. Finlay. Min. & Sci. Press, vol. 96, p. 22. 6 columns. Tables.
- COMPARATIVE TABLE OF WORKING COSTS FOR GOLD MINES.** Min. & Sci. Press, vol. 96, p. 23. Table.
- VARIATIONS IN MINING COSTS.** By J. B. Hastings. Min. & Sci. Press, vol. 96, p. 420. 7½ columns.
- VARIATIONS IN MINING COSTS.** By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 28. 4½ columns. Table.
- WORKING COSTS.** By C. E. Palmer. E. & M. J., vol. 88, p. 1032. 2½ columns. I.
- THE COST OF MINING: General Conditions.** By J. R. Finlay. E. & M. J., vol. 85, p. 795. 17 columns.
- NOTES ON UNDERGROUND MINING COSTS.** By H. F. Roche. P. C. M. & M. Soc. S. A., vol. 7, p. 5. 8 columns, I.; p. 119, 1 column; p. 141, 3½ columns.
- COST OF UNDERGROUND WORK.** P. C. M. & M. Soc. S. A., vol. 10, p. 155. ½ column.
- EFFECT OF DEPTH OF MINING UPON COSTS.** P. C. M. & M. Soc. S. A., vol. 10, p. 414. ½ column.
- COST OF ASBESTOS MINING.** Min. Mag., vol. 13, p. 56. ½ column.
- PROFITS IN MINING: Copper Mining Costs.** E. & M. J., vol. 53, pp. 128, 176, 201, 225, 250; vol. 54, p. 123.
- MINING COSTS AT MIAMI, ARIZONA.** M. & M., vol. 30, p. 83. ½ column.
- COST OF MINING OPERATION (COPPER) OF THE WALLAROO AND MOONTA,**

- AUSTRALIA. E. & M. J., vol. 81, p. 1059. Tables.
- COST OF MINING COPPER ORES IN SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 399. 1 column.
- COSTS AT THE BRADEN COPPER MINE. By W. R. Braden. Min. & Sci. Press, vol. 99, p. 759. 1 column. Table.
- GENERAL WORKING COSTS AT THE BRADEN COPPER MINES, CHILE. E. & M. J., vol. 88, p. 1026. 1 column. Table.
- GENERAL MINING COST AT THE BRADEN COPPER MINES, CHILE. M. & M., vol. 30, p. 506. Table.
- CONDITIONS AND COSTS OF MINING AT THE BRADEN COPPER-MINES, CHILE. By W. Braden. T. A. I. M. E., vol. 40, p. 743. 3 pages.
- COST OF MINING OPERATIONS: Tyee Copper Company, Vancouver Island. E. & M. J., vol. 80, p. 744. Table.
- ALLOUEZ MINING COMPANY, MICHIGAN. E. & M. J., vol. 51, p. 382. Table.
- COST OF MINING AT CANANEA. M. & M., vol. 30, p. 29. Table.
- COST AT THE ATLANTIC MINE, LAKE SUPERIOR. T. I. M. & M., vol. 7, p. 20. Table.
- COST OF MINING OPERATIONS AT THE ATLANTIC, OSCEOLA, CENTRAL AND KEARSARGE MINES. E. & M. J., vol. 55, p. 320. Tables.
- COST OF ALL KINDS OF MINING WORK IN THE LAKE SUPERIOR COPPER MINES. T. A. I. M. E., vol. 6, p. 292.
- COSTS AT THE TAMARACK MINE, LAKE SUPERIOR. T. I. M. & M., vol. 7, p. 22. Table.
- COST OF UNDERGROUND WORK, QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 415. $\frac{1}{2}$ page.
- COSTS AT THE OSCEOLA MINE. By L. S. Austin. Min. & Sci. Press, vol. 98, p. 893. 1 column. Tables.
- CALUMET AND HECLA COSTS. By L. S. Austin. Min. & Sci. Press, vol. 97, p. 847, 3 $\frac{1}{2}$ columns, tables; p. 872, 2 $\frac{1}{2}$ columns.
- WORKING COSTS IN THE BUTTE COPPER MINES. M. & M., vol. 21, p. 158. $\frac{1}{2}$ column.
- COST OF OPERATIONS AT THE RUTH MINE, ELY, NEVADA. E. & M. J., vol. 84, p. 721. Table.
- WORKING COSTS ON MINES, AS PRACTICED ON THE RAND: Management. By J. A. Dennison. T. I. M. & M., vol. 18, p. 108. 24 $\frac{1}{2}$ pages.
- WORKING COSTS ON THE RAND AND COMPARISONS WITH MINES IN CALIFORNIA. By R. E. Browne. Min. & Sci. Press, vol. 95, p. 113. 8 columns. I.
- AVERAGE MINING AND MILLING COSTS ON THE RAND. Min. & Sci. Press, vol. 95, p. 520. Note.
- See also COST OF MILLING.
- PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E., vol. 39, p. 216. 1 page.
- WORKING COSTS AT RAND MINES. E. & M. J., vol. 85, p. 823. 2 columns.
- COST OF GOVERNMENT REGULATION OF RAND MINES. E. & M. J., vol. 85, p. 547. 2 $\frac{1}{2}$ columns.
- REDUCTION OF WORKING COSTS AT THE RAND MINES. By G. A. Denny. E. & M. J., vol. 85, p. 547. 12 columns.
- COSTS AND PROFITS ON THE WITWATERSRAND. By J. R. Finlay. E. & M. J., vol. 86, p. 565. 7 $\frac{1}{2}$ columns.
- WORKING COSTS IN THE BARBERTON GOLDFIELD, SOUTH AFRICA. P. C. M. & M. Soc. S. A., vol. 10, p. 132. 1 column. Tables.
- WORKING COSTS ON THE WITWATERSRAND. E. & M. J., vol. 88, p. 593. 3 columns.
- WORKING COSTS IN MINES, AS PRACTICED ON THE RAND. By J. A.

- Dennison. Min. & Sci. Press, vol. 97, p. 192. 3½ columns.
- COST OF MINING OPERATIONS IN SOUTH AFRICA. Min. & Sci. Press, vol. 94, p. 311.
- COST OF WORKING GOLD MINES IN RHODESIA, SOUTH AFRICA. T. I. M. E., vol. 31, pp. 67, 76, 80, 86 and 96. Tables.
- WORKING COST OF SOME RAND MINES. P. C. & M. Soc. S. A., vol. 2, p. 149. 1½ pages.
- COST OF WORKING A WIDE GOLD REEF IN RHODESIA, SOUTH AFRICA. T. I. M. & M., vol. 12, pp. 293, 300. Tables.
- WORKING COSTS ON THE RAND. P. C. & M. Soc. S. A., vol. 4, pp. 118, 119, 120, 123, 124, 131, 199, 203, 204, 205, 206, 207, 208, 209, 213, 214.
- GENERAL MINING COSTS ON THE WITWATERSRAND. T. I. M. & M., vol. 7, p. 6. Table.
- COST OF WORKING BLANKET DEPOSITS, WEST AFRICA. T. F. I. M. E., vol. 2, p. 81.
- WORKING COSTS AT THE FERREIRA GOLD MINING COMPANY, 1897. Witwatersrand Goldfields, p. 482. 4 pages.
- PROFITS IN MINING, WITWATERSRAND. E. & M. J., vol. 81, p. 670. Table.
- AFRICAN MINING COSTS. Min. & Sci. Press, vol. 74, p. 344. Table.
- COST OF MINING ON THE WITWATERSRAND. E. & M. J., vol. 76, p. 1005.
- THE COST AND PROFITS OF GOLD MINING IN SOUTH AFRICA. E. & M. J., vol. 64, p. 422. 1½ columns.
- COST OF MINING IN RHODESIA. Min. & Sci. Press, vol. 90, p. 106. Tables.
- COST OF MINING OPERATIONS IN RHODESIA: Pumping, Winding, Trammig, Compressor and Drills, Sharpening Drills, Sorting and Crushing, Surveying and Sampling. Min. & Sci. Press, vol. 90, pp. 119, 155. Tables.
- COST OF MINING IN GOLD MINE, RHODESIA: Stoping and Filling in; Trammig, Winding and Pumping Power. T. I. M. & M., vol. 12, p. 300.
- See also COST OF VARIOUS OPERATIONS MENTIONED.
- COST OF MINING AND MILLING FREE GOLD ORES. E. & M. J., vol. 42, p. 168. 3 columns.
- See also COST OF MILLING.
- COST OF MINING IN TRANSVAAL. E. & M. J., Mar. 23, 1905, p. 565. 1 column.
- COST OF MINING IN THE TRANSVAAL. Min. Mag., vol. 11, p. 451. Table.
- COST OF MINING ON THE RAND, SOUTH AFRICA. E. & M. J., vol. 59, p. 535. 1½ columns.
- COST OF MINING OPERATION ON THE RAND. E. & M. J., vol. 81, p. 851. Table.
- COST OF MINING OPERATIONS AT ALASKA TREADWELL GOLD MINES. E. & M. J., vol. 81, p. 1251.
- WORKING COST AT THE MITCHELL'S CREEK GOLD MINES, NEW SOUTH WALES. T. I. M. & M., vol. 15, pp. 538, 539.
- COST OF MINING IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 195, 197, 205, 206, 207, 208, 209, 212. Tables.
- COST (GENERAL) OF MINES IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 473. 4 pages.
- COST OF MINING OPERATIONS IN KALGOORLIE DISTRICT, AUSTRALIA. T. I. M. E., vol. 17, p. 363.
- COST OF MINING AND MILLING AT THE GREATEST AUSTRALIAN GOLD MINE. E. & M. J., vol. 42, p. 236. ¼ column.
- COST OF MINING IN WESTERN AUSTRALIA. Min. & Sci. Press, vol. 93, p. 687. Table.
- CHEAP MINING IN AUSTRALIA. Min. & Sci. Press, vol. 78, p. 206. ¼ column.

- WESTERN AUSTRALIAN GOLD MINING COSTS. Min. & Sci. Press, vol. 93, p. 686. 5 columns.
- COST OF OPERATIONS AT MOUNT MORGAN MINE. Min. & Sci. Press, vol. 88, p. 182. Table.
- COSTS OF MINING GOLD ORE AT SARAWAK, BORNEO. T. I. M. & M., vol. 15, pp. 154, 155, 194.
- MINING COSTS IN THE COBALT DISTRICT, CANADA. T. I. M. E., vol. 36, p. 591. 1½ pages. Tables.
- COST OF MINING, HANDLING, ETC., THE LE ROI MINING COMPANY: Tamarack Mining Company. E. & M. J., vol. 75, pp. 526, 527.
- MINING COST PER TON AT LE ROI, BRITISH COLUMBIA. E. & M. J., vol. 88, p. 104. 1½ columns. Table.
- COST OF MINING OPERATIONS IN THE WAR EAGLE AND CENTER STAR MINES, BRITISH COLUMBIA. M. & M., vol. 21, p. 367. Table.
- MINING COST, WAR EAGLE MINE, BRITISH COLUMBIA. Min. & Sci. Press, vol. 90, p. 268. ¾ column. Tables.
- OPERATING EXPENSES AT THE CARIBOO MINE, BRITISH COLUMBIA. Min. & Sci. Press, vol. 88, p. 148. Table.
- WORKING COSTS, ROSSLAND, BRITISH COLUMBIA: Shaft Sinking, Rising, Drifting, and Extraction. M. & M., vol. 21, p. 367. Table.
- See also COST OF THE VARIOUS OPERATIONS MENTIONED.
- COST OF MINING OPERATIONS OF WAR EAGLE MINE, BRITISH COLUMBIA. Min. & Sci. Press, vol. 80, p. 262. Tables.
- COST OF MINING OPERATIONS AT CENTRE STAR MINE, ROSSLAND, BRITISH COLUMBIA. Min. & Sci. Press, vol. 87, p. 397. Table.
- COST OF MINING AT THE YELLOW ASTER MINE, MOJAVE DESERT. E. & M. J., vol. 77, p. 154. Table.
- COSTS OF MINING OPERATIONS AT THE PORTLAND MINE, COLORADO. E. & M. J., vol. 82, p. 774.
- COSTS OF MINING OPERATIONS AT THE PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 110. Tables.
- COST OF MINING OPERATIONS, CRIPPLE CREEK, COLORADO. Min. & Sci. Press, vol. 88, p. 112. Table.
- MINING COSTS AT CRIPPLE CREEK, COLORADO. E. & M. J., vol. 76, p. 766. 3 columns.
- MINING COSTS AT CRIPPLE CREEK, COLORADO. E. & M. J., vol. 77, p. 70. 1½ columns.
- MINING COST AT THE ALICE MINE, COLORADO. M. & M., vol. 29, p. 296. ½ column.
- AVERAGE WORKING COSTS PER TON OF ORE TREATED AT THE MAITLAND MILL, SOUTH DAKOTA (CYANIDE PLANT). T. A. I. M. E., vol. 35, p. 635.
- COST OF OPERATIONS AT THE REYNOLDS MINE, GEORGIA. T. I. M. & M., vol. 9, p. 371. Table.
- COST OF MINING IN KOREA. Min. & Sci. Press, vol. 93, p. 80. Table.
- COST OF MINING OPERATIONS IN THE CATORCE DISTRICT, MEXICO. E. & M. J., vol. 48, pp. 476, 477.
- COSTS AT THE ESPERANZA MINE. By W. E. Hindry. Min. & Sci. Press, vol. 100, p. 518. 2½ columns. Tables.
- MINING COSTS AT EL COBRE. E. & M. J., vol. 86, p. 415. Tables.
- WORKING COST AT GUANAJUATO. E. & M. J., vol. 90, p. 723. 1 column.
- GENERAL OPERATING COSTS AT EL ORO AND DOS ESTRELLAS. Min. & Sci. Press, vol. 96, p. 198. Table.
- CHEAP MINING IN MONTANA. E. & M. J., vol. 55, p. 364. ½ column.
- FORMER COST OF COMSTOCK MINING, COST OF SUPPLIES, ETC. Min. & Sci. Press, vol. 77, p. 326. 1 column.
- COST OF MINING AT POCHE, NEVADA. Sch. Mines Quart., vol. 27, p. 383. Table.

- THE COST OF THE GOLDFIELD MINING BOOM. By A. Locke. Min. & Sci. Press, vol. 101, p. 541. 5 columns. I.
- COSTS OF MINING IN NICARAGUA. Min. Mag., vol. 11, p. 512. Table.
- COST OF MINING OPERATIONS IN EASTERN OREGON: Wages, Stoping, Drifting, Raising, and Timbering. M. & M., vol. 19, p. 15.
- See also COST OF THE VARIOUS OPERATIONS MENTIONED.
- COST OF MINING IN UTAH. Min. & Sci. Press, vol. 40, p. 86. $\frac{1}{2}$ column.
- GENERAL MINING COSTS AT THE SOUTH UTAH MINE. M. & M., vol. 31, p. 595. $\frac{1}{2}$ column.
- COST OF MINING AT THE STORMONT AND LAST CHANCE MINES. E. & M. J., vol. 29, p. 60. Table.
- COST OF MINE WORK PER LINEAR FOOT, GRANITE MOUNTAIN MINING COMPANY. E. & M. J., vol. 44, p. 432. Table.
- COST OF MINING QUARTZ PYRITE GOLD DEPOSITS. By J. R. Finlay. E. & M. J., vol. 86, p. 512. $18\frac{1}{2}$ columns.
- COST AND PRICE OF MICHIGAN IRON ORE: Presidential Address. T. L. S. M. I., vol. 6, p. 13. 10 pages.
- SELLING PRICE OF NORTHERN IRON ORES FOR SEASON'S DELIVERY—1899. M. & M., vol. 20, p. 100.
- COST PER TON OF MESABI IRON ORE. Min. & Sci. Press, vol. 67, p. 356. Table.
- COST OF MINING OPERATIONS IN THE NEW YORK HEMATITE MINES. E. & M. J., vol. 82, p. 555. $\frac{1}{2}$ column.
- COST OF MINING OPERATIONS AND TRANSPORTATION, ETC., OF LAKE SUPERIOR IRON-ORES. T. F. I. M. E., vol. 13, p. 545. Table.
- See also COST OF TRANSPORTATION.
- COST OF OPERATIONS AT PYRITES MINES. Sch. Mines Quart., vol. 7, pp. 169 and 166.
- COST OF MINING IN SWEDEN. Min. & Sci. Press, vol. 45, p. 358. $1\frac{1}{2}$ columns.
- GENERAL MINING COST PER TON OF ORE IN SOFT AND SHEET GROUND, JOPLIN DISTRICT. M. & M., vol. 30, p. 665. Table.
- MINING COSTS IN THE JOPLIN DISTRICT. By Doss Brittain. Min. & Sci. Press, vol. 96, p. 526. $1\frac{1}{2}$ columns.
- COST OF MINING IN THE LEAD AND ZINC MINES OF MISSOURI. M. & M., vol. 18, pp. 394, 481, 482 and 483; vol. 19, p. 104.
- OPERATING COSTS IN COEUR D'ALENE MINES, IDAHO. Min. & Sci. Press, vol. 89, p. 222. Tables.
- COST OF MINING ORE AT BUNKER HILL AND SULLIVAN MINE, IDAHO. Min. & Sci. Press, vol. 97, p. 29. Table.
- COST OF MINING, HAND-PICKING AND ORE DRESSING IN LEAD MINES, SPAIN. E. & M. J., vol. 73, p. 69.
- See also COST OF SORTING, and CONCENTRATION.
- GENERAL MINING COSTS IN THE NITRATE OF SODA MINES, CHILE. Min. & Sci. Press, vol. 100, p. 182. $\frac{1}{2}$ column.
- MINING COST IN THE CHILE NITER MINES. E. & M. J., vol. 90, p. 19. $\frac{1}{2}$ column.
- COST OF MINING OPERATIONS IN THE ANCHOR TIN MINE, TASMANIA. E. & M. J., vol. 81, p. 1240. Table.
- COSTS OF MINING OPERATIONS AT MOUNT BISCHOFF TIN MINES. Tin Deposits of the World, p. 172. Table.
- COSTS AT THE ANCHOR TIN MINE, TASMANIA. E. & M. J., vol. 81, p. 1249. $2\frac{1}{2}$ columns.
- COST OF OPERATIONS AT MOUNT BISCHOFF TIN MINES, TASMANIA. T. I. M. & M., vol. 14, p. 227. Tables.
- MINING COSTS IN THE CAPE COLONY TIN WORKINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 180. Tables.

MINING COSTS IN RUSSIA: Bogoslovsk Mining Estate. T. A. I. M. E., vol. 39, p. 279, Tables; p. 288, Tables.

MINING COST AT THE LORRAINE MINES OF GERMANY AND FRANCE. E. & M. J., vol. 87, p. 1225. Table.

GENERAL MINING COST AT BOICZA, HUNGARY. Min. & Sci. Press, vol. 100, p. 34. $\frac{1}{2}$ column.

See also METHODS OF MINING, ETC.

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COST OF MINING AND MILLING. Min. & Sci. Press, vol. 73, p. 523. $1\frac{1}{2}$ columns.

COST OF MINING AND MILLING OPERATIONS. Min. & Sci. Press, vol. 86, p. 346. Table.

CHEAP MINING AND MILLING. Min. & Sci. Press, vol. 87, p. 214. $\frac{1}{2}$ column.

RELATIVE COST OF MINING AND MILLING. Min. & Sci. Press, vol. 87, p. 215.

CHEAP MINING AND MILLING. Min. & Sci. Press, vol. 79, p. 577. 1 column.

ECONOMICAL MINING AND MILLING. E. & Min. J., vol. 50, p. 710. $\frac{1}{2}$ column.

COST OF MINING AND MILLING. By R. J. Grant. E. & M. J., vol. 79, p. 804. $4\frac{1}{2}$ columns.

CHEAP MINING AND MILLING OF ORE. Min. & Sci. Press, vol. 75, p. 547. $\frac{1}{2}$ column.

LOWEST COST OF MINING AND MILLING. Min. & Sci. Press, vol. 67, p. 165. 1 column.

CHEAP MINING AND MILLING. E. & M. J., vol. 45, p. 324. 1 column.

COST OF MINING AND MILLING FREE GOLD ORES. E. & M. J., vol. 42, p. 168. 3 columns.

THE COST OF MINING AND SMELTING. Min. & Sci. Press, vol. 33, p. 336. $\frac{1}{2}$ column.

COST OF ASPHALT MINING AND REFINING, INDIAN TERRITORY. E. & M. J., vol. 76, p. 928.

DETAILED COST OF MINING AND MILLING OPERATIONS, STE. GENEVIEVE, MISSOURI. E. & M. J., vol. 34, p. 70. 1 column.

COST OF MINING AND REDUCING ORES, ELY, NEVADA. Min. & Sci. Press, vol. 87, p. 54. Table.

COST OF MINING AND STAMPING COPPER ORE: Wolverine Mines. E. & M. J., vol. 75, p. 936.

See also COST OF REDUCTION, and STAMP MILL PRACTICE.

COST OF MINING AND EXTRACTION AT THE WOLVERINE MINE, LAKE SUPERIOR, MICHIGAN. Min. & Sci. Press, vol. 93, pp. 212, 214. Table.

COST OF MINING AND SMELTING AT BUTTE, MONTANA. E. & M. J., vol. 75, p. 708. $1\frac{1}{2}$ columns.

COST OF MINING OPERATIONS. E. & M. J., vol. 54, p. 347.

COST OF MINING AND EXTRACTION AT BUTTE, MONTANA. Min. & Sci. Press, vol. 93, p. 200.

COST OF MINING AND SMELTING IN JAPAN. Sch. Mines Quart., vol. 15, pp. 367 and 373. Tables.

See also COST OF METALLURGICAL TREATMENT.

COST OF MINING AND TREATMENT OF GOLD-ORES BY AMALGAMATION. T. A. I. M. E., vol. 14, p. 351.

COST OF MINING AND MILLING IN RHODESIA. Min. Mag., vol. 13, p. 9. Tables.

COST OF MINING AND MILLING GOLD QUARTZ. Min. & Sci. Press, vol. 43, p. 121. $\frac{1}{2}$ column.

COMPARATIVE COST OF MINING AND MILLING IN WESTERN AUSTRALIA AND SOUTH AFRICA. Gold Min. & Mill., W Aus., pp. 460, 461.

COST OF MINING AND MILLING AT THE GREATEST AUSTRALIAN GOLD MINE. E. & M. J., vol. 42, p. 236. $\frac{1}{2}$ column.

- COMPARATIVE COSTS OF MINING TREATMENT, ETC., FOR YEARS 1893-1903: Mount Morgan Gold Mining Company. E. & M. J., vol. 76, p. 435. Table.
- RELATIVE COST OF MINING AND MILLING IN CALIFORNIA. Min. & Sci. Press, vol. 73, p. 295. Table.
- CHEAP CALIFORNIA MINING AND MILLING. Min. & Sci. Press, vol. 76, p. 225.
- MINE AND MILL COST: Standard Consolidated Mining Company, California. E. & M. J., vol. 76, p. 397. Tables.
- COST OF MINING AND MILLING IN NORTHERN CALIFORNIA. Min. & Sci. Press, vol. 93, p. 286. Table.
- COST OF MINING AND MILLING IN MOJAVE DESERT, CALIFORNIA. Min. & Sci. Press, vol. 87, p. 405. Table.
- COST OF MINING AND MILLING THE MARMORA, ONTARIO, GOLD ORES. E. & M. J., vol. 30, p. 298. 1 column.
- COST OF MINING AND MILLING IN NOVA SCOTIA, ALSO LABOR COSTS. Min. & Sci. Press, vol. 91, p. 290.
- COST OF MINING AND MILLING GOLD ORES IN NOVA SCOTIA. By W. I. Pierce. T. A. I. M. E., vol. 13, p. 659.
- COSTS OF MINING AND MILLING IN NOVA SCOTIA. Min. & Sci. Press, vol. 91, p. 290.
- COST OF MINING AND MILLING GOLD ORES IN SAN JUAN DISTRICT, COLORADO. E. & M. J., vol. 73, p. 696. $\frac{1}{2}$ column.
- MINING AND MILLING COSTS IN THE MONTEZUMA DISTRICT, COLORADO. M. & M., vol. 28, p. 503. $\frac{1}{4}$ column.
- CHEAP MINING AND MILLING IN SOUTH DAKOTA. By E. J. Kennedy. Min. & Sci. Press, vol. 93, p. 545. $\frac{1}{4}$ column.
- COST OF MINING AND MILLING TELLURIDE ORES IN THE BLACK HILLS. Min. & Sci. Press, vol. 87, p. 290. Table.
- COST OF MINING AND MILLING OF GOLD IN KOREA. T. I. M. & M., vol. 12, p. 242.
- COST OF MINING AND MILLING, SUMMIT VALLEY DISTRICT, MONTANA. Min. & Sci. Press, vol. 41, p. 98.
- COST OF MINING AND MILLING, BIG INDIAN MINE. Min. & Sci. Press, vol. 87, p. 237. Table.
- COST OF MINING AND MILLING AT THE CACTUS MINE, BEAVER COUNTY, UTAH. E. & M. J., vol. 81, p. 813.
- COST OF MINING AND TREATMENT AT THE HAILE MINE, VIRGINIA. E. & M. J., vol. 62, p. 7. Table.
- COSTS OF MINING AND MILLING AT SANTA FE. T. I. M. & M., vol. 12, p. 95. Tables.
- CHEAP MINING AND MILLING AT THE SPANISH MINE. Min. & Sci. Press, vol. 80, p. 318. $2\frac{1}{2}$ columns. Tables.
- COST OF MINING AND TREATMENT, CŒUR D'ALENE, IDAHO. Min. & Sci. Press, vol. 91, pp. 78, 79. Tables.
- COST OF LEAD MINING AND SMELTING IN SPAIN. E. & M. J., vol. 86, p. 329. $1\frac{1}{2}$ columns.
- COST OF MINING AND TREATING LEAD ORES IN MEXICO. T. A. I. M. E., vol. 13, p. 366.
- COST OF MINING AND CLEANING THE ORE IN JOPLIN DISTRICT. E. & M. J., vol. 58, p. 392, $\frac{1}{4}$ column; p. 413, $1\frac{3}{4}$ columns; p. 437, 2 columns; and p. 460, $1\frac{1}{2}$ columns.
- COST OF MINING AND MILLING BLUE ROCK PHOSPHATE IN TENNESSEE. E. & M. J., vol. 80, p. 206.
- COST OF MINING AND CONCENTRATING IN THE ZEEHAN AND DUNDAS SILVER FIELD. T. I. M. & M., vol. 4, p. 63.
- See also COST OF MINING, COST OF MILLING, and CONCENTRATION.

Cost of Coal Mining

- AN INVESTIGATION OF THE COST OF MINING COAL. By J. R. Finlay. E. & M. J., vol. 87, p. 948. $10\frac{1}{2}$ columns.

- DETAILED COSTS OF MINING COAL. Second Geol. Sur. Pa., AC, pp. 359, 360, 362, 363-367.
- THE COST OF MINING COAL. E. & M. J., vol. 87, p. 1099. $6\frac{1}{2}$ columns.
- ECONOMY IN THE PRODUCTION OF COAL. Am. Jour. Min., vol. 2, p. 44. $\frac{1}{2}$ column.
- COST IN NARROW AND GOB ENTRY METHODS OF WORKING. M. & M., vol. 19, p. 59. Table.
- SOME ITEMS OF COST OF COAL MINING. E. & M. J., vol. 25, p. 252. $\frac{1}{2}$ column.
- COMPARATIVE COST OF LONGWALL AND PILLAR AND STALL METHODS. Coll. Engr., vol. 9, p. 122. Tables.
- COST OF WORKING BY ROOM AND PILLAR SYSTEM WITHOUT GOBBING-UP. T. A. I. M. E., vol. 2, p. 110.
- COST OF COAL MINING. E. & M. J., vol. 54, p. 241. $\frac{1}{2}$ column.
- EXPENSE OF KEEPING A LARGE COLLIERY IN WORKING ORDER. E. & M. J., vol. 73, p. 753.
- PRICE AND PRODUCTION OF COAL. E. & M. J., vol. 74, p. 672. $1\frac{1}{2}$ columns.
- COMPARATIVE COSTS OF THE PILLAR-AND-CHAMBER, PILLAR-AND-CHAMBER RETREATING, AND PANEL SYSTEM RETREATING. M. & M., vol. 27, p. 534. Tables.
- COMPARATIVE COST OF WORKING AN 18-IN. COAL-SEAM: When Bottom-Cutting Is Used as Gobbing; and Bottom Cutting Is Used as Brick Material. T. I. M. E., vol. 15, p. 61. Table.
- COST OF GETTING COAL. E. & M. J., vol. 87, p. 1044. 1 column.
- COST OF USE OF HYDRAULIC MINING CARTRIDGES. T. I. M. E., vol. 15, p. 272. Table.
- COMPARATIVE COSTS OF HYDRAULIC COAL GETTERS AND EXPLOSIVES. M. & M., vol. 27, p. 247. Tables.
- SEE also MECHANICAL MINING APPLIANCES: GETTERS.
- COST OF COAL GETTING. E. & M. J., vol. 48, p. 139. Tables.
- COST OF MACHINE MINING OF COAL. M. & M., vol. 17, p. 315. Table.
- COST OF REPAIRS FOR MACHINE MINING IN VIRGINIA COAL MINES. E. & M. J., vol. 84, p. 408.
- COST OF INSTALLATION AND MINING COAL BY MACHINES. By F. W. Parsons. E. & M. J., vol. 82, p. 304. 2 columns.
- COST OF MACHINE-MINING AND PICK-MINING COMPARED. T. I. M. E., vol. 17, pp. 174, 175, 176.
- COSTS OF MACHINE MINING OF COAL. E. & M. J., vol. 89, p. 624. $1\frac{1}{2}$ columns.
- COST OF MACHINE MINING OF COAL. T. I. M. E., vol. 31, pp. 388, 417, 429.
- COST OF MINING COAL BY MACHINES. Sch. Mines Quart., vol. 9, p. 313. Tables.
- COSTS OF COAL-CUTTING BY MACHINERY. T. F. I. M. E., vol. 11, pp. 199, 200.
- COST OF CUTTING COAL BY MACHINE VS. HAND. T. F. I. M. E., vol. 1, p. 126, Table; p. 132, Table; p. 138, Table.
- ELECTRIC MINING MACHINERY: Some Investigations in Regard to Cost of Operation in Various Mines. By J. N. Bulkley. M. & M., vol. 18, p. 170. 8 columns.
- COST OF ELECTRIC VS. COMPRESSED AIR WORK IN COAL-CUTTING. T. F. I. M. E., vol. 11, pp. 499 and 500. Tables.
- COST OF OPERATING ELECTRIC COAL MINING MACHINES. P. E. Soc. W. Pa., vol. 13, p. 165. Table.
- COST OF ELECTRIC COAL-CUTTING AT THE GLENCELELAND COLLIERY. T. F. I. M. E., vol. 9, p. 136. Table.
- SEE also ELECTRIC COAL MINING MACHINES.
- COST OF MINING COAL, RED BANK REGION, PENNSYLVANIA. E. & M. J., vol. 18, p. 51. 1 column.

- COST OF MINING COAL IN THE PENNSYLVANIA COAL MINES.** Rept. Inspr. Mines, Pa., 1879, pp. 321 and 323. Tables.
- COST OF MINING AT DANVILLE, PENNSYLVANIA.** T. A. I. M. E., vol. 20, p. 384.
- COST OF MINING IN SOME PENNSYLVANIA ANTHRACITE COLLIERIES.** E. & M. J., vol. 45, p. 193. 1½ columns.
- ESTIMATED COST OF ANTHRACITE MINING BY WITHDRAWING.** E. & M. J., vol. 48, p. 380. Table.
- COST OF ANTHRACITE COAL MINING PER CAR, OR WHAT THE MINER GETS.** E. & M. J., vol. 73, pp. 754 and 887.
- COST OF ANTHRACITE MINER'S OUTFIT.** The Anthracite Coal Industry, Roberts, p. 112. Table.
- INCIDENTAL WORKING EXPENSES OF ANTHRACITE MINER.** The Anthracite Coal Industry, Roberts, p. 113. Table.
- COST OF MINING IN THE WYOMING REGION.** E. & M. J., vol. 17, p. 37. 2 columns.
- THE COST OF ANTHRACITE COAL.** Coll. Engr., vol. 13, p. 126. 2 columns.
- COST OF PRODUCING A TON OF ANTHRACITE COAL.** The Anthracite Coal Industry, Roberts, pp. 45 and 57. 10 pages. I.
- THE COST OF ANTHRACITE COAL.** E. & M. J., vol. 80, p. 595. 2 columns.
- PRICE PAID THE MINERS FOR CHAMBER WORK IN ANTHRACITE COAL MINES OF PENNSYLVANIA.** The Anthracite Coal Industry, Roberts, p. 28.
- See also **MINER'S WAGES.**
- THE COST OF MINING ANTHRACITE.** E. & M. J., vol. 79, p. 793. 1½ columns.
- COST OF RECOVERY OF ANTHRACITE FROM CULM BANKS.** E. & M. J., vol. 85, p. 720. 2 columns.
- THE COST OF COAL AND IRON IN ALABAMA.** E. & M. J., vol. 57, p. 74. 1½ columns.
- COST OF MINING COAL IN THE CROW'S NEST PASS, CANADA, FOR WIDE AND NARROW WORK, ALSO COST OF HOISTING AND SCREENING.** E. & M. J., vol. 73, p. 758. ¼ column.
- COST OF COAL-MINING IN CHILE, SOUTH AMERICA.** T. I. M. E., vol. 15, p. 242. Table.
- COST OF MINING IN THE KAIPING COAL MINES, CHINA.** T. I. M. & M., vol. 10, p. 425.
- COST OF PRODUCTION OF COAL AT THE MOUNT DIABLO COAL MINES.** Min. & Sci. Press, vol. 35, p. 8. ¼ column.
- COST OF COAL MINING IN GERMANY.** E. & M. J., vol. 77, p. 804. ¼ column.
- MINING COSTS IN ILLINOIS.** T. A. I. M. E., vol. 40, p. 43. 2 pages.
- COST OF COAL-MINING IN INDIA.** T. I. M. E., vol. 27, p. 191. Table.
- COST OF MINING OPERATIONS IN INDIA (COAL).** T. I. M. E., vol. 22, p. 191.
- COST OF MINING COAL IN INDIANA.** E. & M. J., vol. 90, p. 869. ¼ column.
- COST OF UNDERCUTTING COAL IN IOWA.** T. F. I. M. E., vol. 13, p. 488.
- COST OF COAL MINING IN MEXICO.** E. & M. J., vol. 89, p. 1076. 1 column.
- ESTIMATED COSTS OF MINING AND COKING AND RELATIVE COMMERCIAL RETURNS FROM OPERATING IN THE CONNELLSVILLE AND WALSTON-REYNOLDSVILLE DISTRICTS, PENNSYLVANIA.** By E. V. D'Invilliers. T. A. I. M. E., vol. 35, p. 44. 16 pages. M. & M., Jan., 1905, p. 313. 8 columns.
- COST SHEET OF A VIRGINIA COLLIERY.** E. & M. J., vol. 87, p. 950. Table.
- COST OF COAL MINING IN EUROPE.** E. & M. J., vol. 71, p. 656.

See also COST OF COAL MINING.

COST OF WORKING SEAMS OF DIFFERENT THICKNESS IN ENGLAND, FRANCE, ETC. T. I. M. E., vol. 20, pp. 138, 139.

COMPARATIVE COSTS AND OUTPUTS OF VARIOUS METHODS OF MINING IN THE ST. ETIENNE COAL FIELDS. T. I. M. E., vol. 36, p. 421. 3 pages.

COST OF GETTING COAL IN A SOUTH YORKSHIRE COLLIERY. Engineering, London, vol. 74, p. 262. Table.

COST OF CUTTING COAL WITH THE JEFFREY MACHINE, CANNOCK WOOD PITS, ENGLAND. T. F. I. M. E., vol. 7, p. 307. Table.

See also BREAKING DOWN COAL AT THE FACE, and MINING MACHINERY AT THE FACE.

COST OF HEWING COAL IN ENGLISH MINES. Coll. Working and Management, pp. 219 and 220. Tables.

COMPARATIVE COSTS OF MINING BY DIFFERENT SYSTEMS IN ENGLAND. Coll. Working and Management, pp. 227, 228, 231, 232. Tables.

PRICES PAID IN ENGLAND FOR BOARD AND WALL WORK. Coll. Working and Management, pp. 78, 79 and 94. Tables.

COST OF COAL MINING IN WEST YORKSHIRE COAL FIELDS. T. F. I. M. E., vol. 7, p. 143.

COST OF MINING COAL IN ENGLAND FROM 1763-1836. Coll. Working and Management, p. 15. Tables.

COSTS OF MINING COAL IN ENGLAND: Panel System, and Modified Longwall. Coll. Working and Management, pp. 243, 245, 246, 247. Tables.

See also PANEL MINING.

COST OF COAL CUTTING IN THE NORTHERN COALFIELD, ENGLAND. E. & M. J., vol. 86, p. 1105. 1½ columns.

THE COST OF LONGWALL IN ENGLAND. By G. R. Dixon. E. & M. J., vol. 86, p. 964. 6½ columns. I.

LONGWALL TONNAGE PRICES IN ENGLAND. E. & M. J., vol. 85, p. 1148. Table.

See also LONGWALL MINING.

COST OF ROBBING PILLARS IN ENGLISH COAL MINES: Coll. Working and Management, pp. 173 and 191. Table.

COST OF WORKING PILLARS. Coll. Working and Management, p. 245. Table.

See also DRAWING PILLARS IN COAL MINES.

Cost of Metal Mining

COST OF MINING. By W. R. Ingalls. E. & M. J., vol. 80, p. 302. 3½ columns.

THE COST OF MINING. By W. R. Ingalls. E. & M. J., Feb. 16, 1905, p. 317, 5½ columns; vol. 79, p. 909, 2 columns; vol. 80, p. 62, 7 columns.

COMPARATIVE MINING COSTS: Mining, Transport, Milling, Concentrating, Cyaniding, etc. E. & M. J., vol. 75, p. 971. ½ column.

EFFECT OF WIDTH OF VEIN ON COST OF MINING. E. & M. J., vol. 83, p. 965. ½ column.

THE COST OF MINING. Min. & Sci. Press, vol. 91, p. 53. 1½ columns.

THE CHEAPEST MINING. Min. & Sci. Press, vol. 91, p. 135. ½ column.

CHEAP GOLD MINING AND MILLING IN THE BLACK HILLS. Min. & Sci. Press, vol. 91, p. 137. 2 columns.

MINING COSTS IN SAN JUAN, COLORADO. Min. & Sci. Press, vol. 91, p. 206.

COSTS IN MINING: Crosscutting and levels. By W. H. Storms. Min. & Sci. Press, vol. 89, p. 322. 1½ columns.

DETAILED COST OF MINING IN THE ELKHORN MINING DISTRICT, MONTANA. U. S. G. S., 22nd Rept., pt. 2, p. 418. Table.

- WORKING COSTS IN THE FATHOMAGE SYSTEM. Min. & Sci. Press, vol. 101, p. 410. $1\frac{1}{2}$ columns.
- See also the CONTRACT SYSTEMS.
- DIFFERENCE OF COST OF MINING IN WET AND DRY GROUND. E. & M. J., vol. 80, p. 819.
- COST OF MINING BY FIRE-SETTING VS. HAND WORK. T. F. I. M. E., vol. 5, p. 87.
- COST OF DRIFT MINING. Min. & Sci. Press, vol. 60, p. 286. Table.
- COST OF DRIFT MINING. Min. & Sci. Press, vol. 68, p. 22. Tables.
- DRIFT MINING COSTS. Min. & Sci. Press, vol. 74, p. 213. $\frac{1}{2}$ column.
- COST OF DRIFT MINING, CALIFORNIA. Min. & Sci. Press, vol. 53, p. 20. Table.
- COST OF DRIFT-MINING. Sch. Mines Quart., vol. 8, p. 300, etc.
- See also DRIFT MINING.
- COST OF MINING COPPER ORE CONTAINING HEAVY SPAR. Min. & Sci. Press, vol. 89, p. 194. Table.
- COST OF MINING OPERATIONS OF THE OLD DOMINION COPPER AND SMELTING COMPANY, ARIZONA. E. & M. J., vol. 79, p. 1155.
- COST OF MINING AT THE HOMESTAKE MINE. T. A. I. M. E., vol. 17, p. 577. Table.
- COST OF MINING BY THE CAVING SYSTEM AT BINGHAM CANYON, UTAH. E. & M. J., vol. 84, p. 439. 1 column.
- COST OF MINING AND TREATMENT OF RIO TINTO COPPER ORES. E. & M. J., vol. 36, p. 325. $\frac{1}{2}$ column. Table.
- COST OF MINING OPERATIONS OF COPPER AND TIN ORES IN INDIA. T. F. I. M. E., vol. 9, p. 449.
- COST OF MINING: Tamarack Mining Company. E. & M. J., vol. 46, p. 217. Table.
- COST OF MINING, ANACONDA COPPER COMPANY, MONTANA. Ore Dressing, Richards, vol. 2, p. 1130. Table.
- COST OF MINING BY CAVING SYSTEM AT ELY, NEVADA. M. & M., vol. 29, p. 80, 1 column; p. 82, table.
- COST OF MINING IN LAKE SUPERIOR. E. & M. J., vol. 78, p. 906. Table.
- See also THE CAVING SYSTEMS OF MINING.
- COST OF MINING OPERATIONS IN LEAD MINES OF AFGHANISTAN. T. F. I. M. E., vol. 6, p. 455.
- PROFITS OF GOLD MINING. Min. & Sci. Press, vol. 67, p. 339. 1 column.
- PROFIT PER TON OF PRINCIPAL GOLD MINES OF THE WORLD. T. I. M. & M., vol. 12, p. 277. Table.
- COST OF WORKING GOLD DEPOSITS. Min. & Sci. Press, vol. 60, p. 336. $\frac{1}{2}$ column.
- COST OF MINING ON THE RAND. Gold Mines on the Rand, pp. 258, 264 and 265. Table.
- MINING COST PER TON UNDERGROUND, RAND MINES, RAND, SOUTH AFRICA. M. & M., vol. 27, p. 188. Table.
- COST OF MINING IN UTAH (1880). Min. & Sci. Press, vol. 40, p. 86. Table.
- COSTS OF MINING ON THE RAND IN 1891. T. F. I. M. E., vol. 3, pp. 870, 871, 872.
- COSTS AT THE ALASKA-TREADWELL MINES. Min. & Sci. Press, vol. 85, p. 174. $2\frac{1}{2}$ columns.
- THE COST OF MINING AT BROKEN HILL, AUSTRALIA. Miner's Pocket Book, Lock, p. 260. Table.
- COST OF STOPING, LUCKNOW, NEW SOUTH WALES. Miner's Pocket Book, Lock, p. 276. Table.
- WORKING COSTS IN THE DEEP LEADS OF VICTORIA. T. I. M. & M., vol. 17, p. 254. 10 pages. Tables.
- CONDITIONS AFFECTING COST OF WORKING THE DEEP LEADS OF VICTORIA. T. I. M. & M., vol. 17, p. 224. 3 pages.
- COST OF GOLD-MINING IN NEW ZEALAND. T. F. I. M. E., vol. 10, p. 411. Table.
- COST OF OPERATIONS: Gold Mining in Brazil. T. F. I. M. E., vol. 4, p. 232. Table.

- WORKING COSTS AT ROSSLAND, BRITISH COLUMBIA. M. & M., vol. 21, p. 367.
- COST OF CENTRE STAR MINING OPERATIONS. Min. & Sci. Press, vol. 82, p. 49. Table.
- THE GWIN MINE COST SHEET. Min. & Sci. Press, vol. 82, p. 62. Table.
- COST OF MINING OPERATIONS AT THE LE ROI MINE, ROSSLAND, BRITISH COLUMBIA. J. C. M. I., vol. 5, p. 314, etc.
- COST OF MINING AND MILLING "FREE" GOLD ORES: California, Dakota, Venezuela, etc. Min. & Sci. Press, vol. 53, p. 135. 3½ columns.
- See also COST OF MINING AND TREATMENT.
- COST OF MINING, MAHONEY MINE, CALIFORNIA. Min. & Sci. Press, vol. 82, p. 6. Table.
- COSTS, 30 YEARS AGO AND NOW, GEORGETOWN, COLORADO. Min. & Sci. Press, vol. 82, p. 157. Table.
- COST OF MINING OPERATIONS: Cripple Creek; Rossland, British Columbia, and Cœur D'Alene District. Rept. Zinc Comm., Canada, p. 42. 8 pages.
- GENERAL MINING COST, CRIPPLE CREEK. E. & M. J., vol. 87, p. 957. 1½ columns.
- COST PER FOOT OF MINING AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, p. 1327. Table.
- COST OF MINING IN COLORADO. Min. & Sci. Press, vol. 23, p. 83. 1 column.
- COST OF MINING AND LABOR IN THE REMEDIOS, COLOMBIA, MINES. T. I. M. & M., vol. 4, pp. 14 and 20.
- See also COST OF LABOR.
- COST OF MINING HOMESTAKE MINE, South Dakota. Min. & Sci. Press, vol. 88, p. 165. Table.
- COST OF MINING AT THE HOMESTAKE, DAKOTA. T. A. I. M. E., vol. 17, pp. 577, 578.
- COST OF MINING OPERATIONS IN INDIAN GOLD-FIELDS. T. F. I. M. E., vol. 11, pp. 353, 358, 365.
- COST OF MINING OPERATIONS IN THE GOLD MINES OF JAPAN. T. I. M. & M., vol. 15, pp. 219, 220, 221.
- COST OF MINING OPERATIONS AND SUPPLIES OF COMBINATION MINES, GOLDFIELD, NEVADA. E. & M. J., vol. 80, p. 74. Table.
- COSTS OF GLORY-HOLE MINING AT THE DE LAMAR MINES, NEVADA. E. & M. J., vol. 87, p. 453. Tables.
- See also OPEN CUT MINING.
- THE COST OF MINING. E. & M. J., vol. 79, p. 669. 3 columns.
- MINING COST AT MERCUR, UTAH. M. & M., Aug., 1904, pp. 2 and 3; E. & M. J., vol. 79, p. 1005. 2½ columns.
- METHOD OF MINING, MERCUR, UTAH. Costs of Mining, M. & M., Aug., 1904, pp. 2 and 3.
- COST OF IRON ORE MINING IN THE LAKE SUPERIOR MINES. Min. & Sci. Press, vol. 72, p. 461, ½ column; vol. 73, p. 7. Table.
- COST OF MINING AND TIMBERING IN THE SOFTER HEMATITE ORES OF FURNESS, ENGLAND. T. F. I. M. E., vol. 8, p. 49.
- See also COST OF SUPPORT.
- COST OF MINING ZINC ORES IN MISSOURI. E. & M. J., vol. 65, p. 367.
- COST OF EXTRACTION OF ORE AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol. 8, p. 350. ¼ page.
- COST OF MINING IN JOPLIN DISTRICT. M. & M., vol. 18, p. 394. Table.
- COST OF MINING PENNSYLVANIA ZINC ORES. E. & M. J., vol. 24, p. 3. Table.
- DETAILED COST OF MINING OPERATIONS AT JOPLIN AND WEBB CITY, MISSOURI. Univ. Geol. Sur. of Kans., vol. 8, p. 373. Table.
- COST OF MINING IN THE JOPLIN REGION. Ore Dressing, Richards, vol. 2, p. 1129. Table.

- COST OF MINING QUICKSILVER.** Min. & Sci. Press, vol. 68, p. 50. Tables.
- COST OF MINING IN THE GUADALCAZAR DISTRICT, MEXICO (QUICKSILVER).** T. I. M. & M., vol. 4, p. 137.
- COST OF MINING AT POTOSI, BOLIVIA.** T. A. I. M. E., vol. 19, p. 95.
- COST OF MINING AT THE CARIBOU SILVER MINES, COLORADO: Shaft Sinking, Level Driving, Tunnelling, and Stopping.** E. & M. J., vol. 24, p. 105. Table.
- COST OF MINING OPERATIONS FOR WESTERN MINES: Comstock Lode. The Mines of the West, Raymond, 1869, pp. 62 to 75.**
- COST OF SILVER-MINING IN MEXICO.** T. I. M. E., vol. 21, p. 213.
- COST OF MINING AT LA DESCUBRIDORA MINE, MEXICO.** E. & M. J., vol. 72, p. 699.
- COST OF MINING OPERATIONS IN THE TIN MINES OF TASMANIA.** T. F. I. M. E., vol. 13, p. 581.
- COST OF TIN MINING OPERATIONS AT PERAK, CHINA.** T. I. M. & M., vol. 6, p. 65, etc.
- THE COST OF MINING AND EARTH-WORK IN ASIA MINOR, PERSIA, AND BURMA.** By T. T. Wynne. T. I. M. & M., vol. 4, p. 290.
- COST OF QUARRYING ORE IN THE OPEN, COST IN THE "JOYA" MINE PER TON OF 1000 KILOS, SPAIN.** T. A. I. M. E., vol. 21, p. 93.
- See also **METHODS OF MINING: General and Miscellaneous.**
- Cost of Milling**
- MILLING COSTS.** By R. S. Handy. Min. & Sci. Press, vol. 98, p. 156. 2 columns. D.
- MILLING COSTS.** P. C. M. & M. Soc. S. A., vol. 8, p. 238. Tables.
- CHEAP MILLING AND MINING.** Min. & Sci. Press, vol. 74, p. 473. $\frac{1}{2}$ column.
- COST OF ORE-TREATMENT.** T. F. I. M. E., vol. 4, pp. 355, 356, 357, 358, 362, 363, 366, 371, 396, 406, 407, 408.
- COST OF CONSTRUCTION AND OPERATION OF DRESSING WORKS.** Min. & Sci. Press, vol. 34, p. 233. $\frac{1}{2}$ column.
- COST OF MILLING ORE: How the Cost is Reduced.** Min. & Sci. Press, vol. 45, p. 204. $\frac{1}{2}$ column.
- COST OF MILLING, PAST AND PRESENT.** Min. & Sci. Press, vol. 74, p. 235. Table.
- COST OF MILLING IN SEVERAL OF THE WESTERN STATES.** Min. & Sci. Press, vol. 53, p. 135.
- FACTORS AFFECTING COST OF MILLING.** Ore Dressing, Richards, vol. 2, p. 1127. 2 pages.
- THE COST OF GOLD MILLING.** Min. & Sci. Press, vol. 87, p. 10. 2 $\frac{1}{2}$ columns. Table.
- COST OF MILLING SILVER ORES.** Min. & Sci. Press, vol. 57, p. 344. $\frac{1}{2}$ column.
- COST OF ORE TREATMENT: Especially Gold.** T. F. I. M. E., vol. 5, pp. 286, 288, 289, 290, 292, 293, 294, 295, 297, 315, 317, 323, 326, 334, 335, 339, 340, 341, 345, 348, 350; vol. 6, pp. 77, 78, 87, 91, 101, 102, 103, 107, 108, 310, 311, 337, 485, 487, 488; vol. 7, pp. 75, 81, 83, 84, 86, 87, 93, 94.
- COST OF MILLING ON THE RAND.** Gold Mines of the Rand, p. 261. $\frac{1}{2}$ column.
- COST OF GOLD MILLING.** T. F. C. M. I., vol. 3, p. 106. Table.
- COSTS OF THE ELMORE PROCESS.** E. & M. J., vol. 88, p. 207. $\frac{1}{2}$ column.
- COST OF CONCENTRATION BY ELMORE PROCESS.** Min. & Sci. Press, vol. 86, p. 338. $\frac{1}{2}$ column.
- COST OF ELMORE OIL CONCENTRATION IN WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., p. 414.
- COST OF THE FLOTATION PROCESS.** Min. & Sci. Press, vol. 94, p. 730.

COST OF THE ELMORE VACUUM FLOTATION PROCESS. E. & M. J., vol. 83, p. 1205. $\frac{1}{2}$ column.

See also FLOTATION PROCESSES.

COST OF CONCENTRATION WITH THE FRUE VANNER. Gold Mines of the Rand, pp. 207, 261. Table.

COST OF VANNER REPAIRS: Belts, etc., for Various Makes. Ore Dressing, Richards, vol. 2, p. 664. Tables.

COST OF WOOD JIG GRATES. E. & M. J., vol. 88, p. 1025. $\frac{1}{2}$ column.

COST OF MAGNETIC SEPARATION BY WETHERILL SEPARATOR IN COLORADO. E. & M. J., vol. 83, p. 1137.

COST OF MAGNETIC SEPARATION OF ZINC ORES. Rept. Zinc Comm., Canada, pp. 88 and 99. Tables.

PRICE OF DING'S MAGNETIC SEPARATOR, SIZES, ETC. Rept. Zinc Comm., Canada, p. 114. Table.

COST OF CONCENTRATION OF IRON-ORE BY MAGNETIC SEPARATORS. T. A. I. M. E., vol. 20, p. 608.

COST OF CONCENTRATION WITH WETHERILL MAGNETIC CONCENTRATOR. E. & M. J., vol. 64, p. 100.

COST OF MAGNETIC CONCENTRATION AT TILLY FOSTER MINE. T. A. I. M. E., vol. 21, p. 521.

COST OF MAGNETIC CONCENTRATION OF IRON-ORE AT TILLY FOSTER MINE. T. A. I. M. E., vol. 19, p. 73.

See also MAGNETIC SEPARATION.

COST OF BLAKE-MORSCHER ELECTRO-STATIC SEPARATOR. Rept. Zinc Comm., Canada, p. 119.

See also ELECTRO-STATIC SEPARATION.

COST AT THE ATLANTIC MILL, LAKE SUPERIOR, FOR 1881-1887. T. A. I. M. E., vol. 17, p. 676.

COST OF CONCENTRATING COPPER-ORES IN AUSTRALIA. T. I. M. E., vol. 23, p. 521.

COST OF MINING AND TREATMENT OF RIO TINTO COPPER ORES. E. & M. J., vol. 36, p. 325. Table.

See also COST OF MINING AND TREATMENT.

COST OF MILLING, ANACONDA COPPER COMPANY. Ore Dressing, Richards, vol. 2, p. 1130. Table.

MILLING COST AT LAKE SUPERIOR COPPER MILLS, FROM REPORTS. Ore Dressing, Richards, vol. 2, p. 1131. 1 page.

MILLING COST, ATLANTIC MINE AND MILL. T. I. M. & M., vol. 7, p. 20. Table.

COST OF ORE TREATMENT, MOUNT LYELL. Min. & Sci. Press, vol. 86, p. 332. Table.

COST OF CONCENTRATING AT THE WALL MILL, BINGHAM, UTAH. E. & M. J., vol. 82, p. 1011. $\frac{1}{2}$ column.

COST OF EXTRACTION IN THE BOSTON MILL, BINGHAM, UTAH. E. & M. J., vol. 84, p. 485. 1 column.

COST OF MILLING PYRITIC ORES ON THE RAND. T. I. M. & M., vol. 7, p. 137. Table.

MILLING COSTS ON THE WITWATERS-RAND. T. I. M. & M., vol. 7, p. 6. Table.

COST OF ORE TREATMENT ON THE RAND. Min. Mag., vol. 12, pp. 175, 176, 186.

COST OF STAMPING AND TREATMENT PER TON ON THE RAND. E. & M. J., vol. 78, p. 141. Tables.

COST OF DRYING ORE ON RAND. J. C. & M. Soc. S. A., vol. 1, p. 82. $\frac{1}{2}$ page.

GENERAL WORKING (MILLING) COSTS FOR THE RAND. E. & M. J., vol. 88, p. 1069. 6 columns. Tables.

COST OF MILLING AT ALASKA-TREADWELL MINES. E. & M. J., vol. 77, p. 715. $\frac{1}{2}$ column.

COST OF STAMP-MILLING IN THE BLACK HILLS, SOUTH DAKOTA. T. A. I. M. E., vol. 25, p. 920.

COST OF MILLING IN 1887-'88 AT HOMESTAKE AND GOLDEN STAR MILLS. T. A. I. M. E., vol. 17, p. 540.

COST OF ORE TREATMENT, WESTERN AUSTRALIA: Concentration and Cyaniding. Min. & Sci. Press, vol. 93, p. 688. Tables.

- COST OF MILLING OF TELLURIDE ORES, KALGOORLIE, AUSTRALIA. Min. & Sci. Press, vol. 90, p. 205. Tables.
- COST OF MILLING AND REDUCTION, OROYA-BROWN HILL, KALGOORLIE. Min. & Sci. Press, vol. 91, p. 384. Table.
- COST OF MILLING IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 195, 197, 212.
- GENERAL WORKING COST IN NEW SOUTH WALES: Milling Costs. T. I. M. & M., vol. 7, pp. 149, 150, 152. Tables.
- MILLING AND GENERAL COST OF TREATING BROKEN HILL ORES, NEW SOUTH WALES. E. & M. J., vol. 87, p. 940. Tables.
- COST OF OPERATIONS AT MACTEAR: SOUTH GERMAN MINES, MALDEN, VICTORIA: Mining and Milling. T. I. M. & M., vol. 6, p. 46.
- METHODS AND COST OF MILLING GOLD ORES IN QUEENSLAND. T. I. M. E., vol. 21, pp. 396, 399, 400. Table.
- COST OF MILLING MAHONEY MILL, CALIFORNIA. Min. & Sci. Press, vol. 82, p. 6. Table.
- COST OF MILLING IN CALIFORNIA. Min. & Sci. Press, vol. 73, p. 276.
- COST OF MILLING, GRASS VALLEY, CALIFORNIA, NORTH STAR MINE. T. I. M. & M., vol. 5, p. 156.
- COST OF TREATMENT AT YMIR, NELSON, BRITISH COLUMBIA. Min. & Sci. Press, vol. 92, p. 202. Table.
- COST OF OPERATING IN THE SLOCAN MILLS. J. C. M. I., vol. 6, p. 159.
- MILLING COSTS OF GILPIN COMPANY, COLORADO (1892). E. & M. J., vol. 54, p. 245, etc.
- COST OF MILLING TELLURIDE ORES IN WESTERN AUSTRALIA. Min. & Sci. Press, vol. 82, p. 158. Table.
- MILLING COSTS AT THE GOLDEN CYCLE CONCENTRATOR. M. & M., vol. 30, p. 673. 1½ columns.
- MILLING COSTS AT THE ALICE MINE, COLORADO. M. & M., vol. 29, p. 296. ½ column.
- FREIGHT AND TREATMENT CHARGES ON CRIPPLE CREEK ORE. E. & M. J., vol. 78, p. 1022. Table.
- See also COST OF TRANSPORTATION.
- MILLING COSTS AT CRIPPLE CREEK. E. & M. J., vol. 87, p. 957. 1½ columns.
- COST OF TREATMENT OF GOLD ORES IN MILLS HAVING CAPACITIES OF 3,000 TONS PER MONTH, CRIPPLE CREEK, COLORADO. T. I. M. & M., vol. 8, p. 82.
- SCALE OF CHARGES IN CYANIDING AND CHLORINATION PLANTS, CRIPPLE CREEK, COLORADO. T. I. M. & M., vol. 8, p. 90.
- CHARACTER OF ORE, COST OF TREATMENT AND FREIGHT RATES AT WILSON, COLORADO. Sch. Mines Quart., vol. 20, p. 46.
- APPROXIMATE COST OF GOLD MILLING IN COLORADO, IN 1898. Engineering, London, vol. 66, pp. 6, 223. Tables.
- COST OF MILLING ARGENTIFEROUS GALENA IN NORTHERN IDAHO. Ore Dressing, Richards, vol. 2, p. 1130. Table.
- COST OF STAMP-MILLING IN IDAHO. Ore Dressing, Richards, vol. 2, p. 1133. Table.
- COST OF MILLING AT THE ALASKA-TREADWELL. Ore Dressing, Richards, vol. 2, p. 1133. Table.
- MILLING COSTS AT UNSAN, KOREA. Min. & Sci. Press, vol. 100, p. 606. Table.
- COST OF ORE TREATMENT IN MEXICO. Min. & Sci. Press, vol. 84, p. 66. Table.
- COST OF TREATMENT OF GOLD AND SILVER ORES AT GUANAJUATO, MEXICO. Min. & Sci. Press, vol. 81, p. 5. Tables.
- COST OF MILLING SILVER-GOLD ORES AT THE PALMAREJO MINE, MEXICO.

- T. A. I. M. E., vol. 36, p. 264. Table.
- COST OF TREATMENT OF TON OF ORE IN THE MONTEZUMA DISTRICT, MEXICO. E. & M. J., vol. 79, p. 1008. Table.
- MILLING COSTS ON GOLD AND SILVER ORES AT TAJO ROSARIO, MEXICO. T. A. I. M. E., vol. 41, p. 338, table; p. 367, table.
- COST OF MILLS AND EQUIPMENT, BLACK HILLS, MEXICO. T. F. I. M. E., vol. 7, p. 107.
- ANALYSIS OF MILLING COSTS PER TON OF PULP AND ORE TREATED AT ELKHORN MINE, MONTANA. U. S. G. S., 22 Ann. Rept., pt. 2, p. 417. Tables.
- COST OF MILLING ORE IN MONTANA. Min. & Sci. Press, vol. 55, p. 149. Table.
- COST OF MILLING AT THE ELKHORN MINING COMPANY MILL. E. & M. J., vol. 51, p. 473. Table.
- COST OF MILLING, MONTANA. T. A. I. M. E., vol. 18, p. 248.
- COST OF ORE TREATMENT OF THE COMBINATION MINE. Min. & Sci. Press, vol. 93, p. 454. Tables.
- COST OF ORE TREATMENT AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 572. Tables.
- THE COST OF MILLING SILVER ORES IN UTAH AND NEVADA. By R. P. Rothwell. T. A. I. M. E., vol. 8, p. 551.
- COST OF EXTRACTION PER TON APART FROM GENERAL EXPENSES, CABEZAS DEL PASTO MINE, SPAIN, 1890. T. A. I. M. E., vol. 21, p. 100.
- COST OF AMALGAMATING GOLD ORES. E. & M. J., vol. 38, p. 140.
- MILLING: Amalgamation, etc., in California. Min. & Sci. Press, vol. 19, p. 24. Table.
- COST OF AMALGAMATING ORES IN UTAH AND NEVADA. Min. & Sci. Press, vol. 42, p. 274, 1½ columns: p. 306, 1½ columns.
- COST OF AMALGAMATION AND OTHER WET PROCESSES IN MEXICO FOR SILVER ORES. T. I. M. & M., vol. 13, p. 115. Table.
- COMPARATIVE COSTS OF AMALGAMATION, CANVAS TABLES, AND CYANIDING GOLD ORES. Min. & Sci. Press, vol. 84, p. 48. Table.
- See also AMALGAMATION OF GOLD AND SILVER.
- COST OF THE REESE RIVER PROCESS OF AMALGAMATING. E. & M. J., vol. 11, p. 26. Table.
- COST OF THE PATIO PROCESS. Min. & Sci. Press, vol. 94, p. 825. Table.
- COST OF PATIO PROCESS AT SAN DIMAS. E. & M. J., vol. 34, p. 294. Table.
- COST OF PATIO PROCESS. T. A. I. M. E., vol. 11, pp. 76, 77.
- COST OF PATIO PROCESS. T. A. I. M. E., vol. 13, p. 370.
- See also THE PATIO PROCESS OF AMALGAMATION.
- COST OF CYANIDING AT MERCUR, UTAH. E. & M. J., vol. 54, p. 441. Table.
- COST OF MILLING AND CYANIDING IN THE TRANSVAAL. Min. Mag., vol. 11, p. 451. Table.
- COST OF FILTER PRESSING ON THE RAND. Min. Mag., vol. 12, p. 186.
- COST OF SLIME TREATMENT AT THE TAJO, ROSARIO CYANIDE PLANT, MEXICO. T. A. I. M. E., vol. 41, pp. 352, 354 and 357. Table.
- See also SLIMES AND THEIR TREATMENT.
- DETAILED COST OF RUSSELL'S LIXIVIATION PROCESS. E. & M. J., vol. 39, p. 438. 1 column.
- COST OF MILLING AND CYANIDING AT PALMAREJO. E. & M. J., vol. 80, p. 340.
- See also CYANIDING GOLD, and COST OF CYANIDING.
- COST OF PLANT FOR TREATING BLACK SANDS FOR IRON AND STEEL. P. C. M. & M., Soc. S. A., vol. 7, p. 418. ½ column.

COST OF MILLING IN THE JOPLIN REGION. M. & M., vol. 28, p. 154. $\frac{1}{2}$ column.

COST OF DRESSING LEAD ORE AT BONNE TERRE, MISSOURI. T. A. I. M. E., vol. 17, p. 676.

PRICE OF CŒUR D'ALENE CONCENTRATES: Freight and Smelting Charges. E. & M. J., vol. 48, p. 449, 1 column; p. 493, $\frac{1}{2}$ column; p. 520, $\frac{1}{2}$ column; p. 541, 1 column.

MILLING COST AT THE PIERREFITTE MINE, FRANCE. T. A. I. M. E., vol. 39, p. 390. 1 page. Table.

MILLING AND LABOR COSTS IN SOUTHWEST WISCONSIN. E. & M. J., vol. 81, p. 1141, etc. Tables.

COST OF CONCENTRATION AT GALENA, KANSAS: Wear of Crusher Jaws, Rolls, Shells, Elevator Buckets, Centrifugal Pumps, Screens, and Rubber Belting. Univ. Geol. Sur. of Kans., vol. 8, p. 351. 6 pages.

COST OF MILLING IN THE JOPLIN DISTRICT. Ore Dressing, Richards, vol. 2, p. 1129. 1 page.

COST OF MILLING IN JOPLIN DISTRICT. M. & M., vol. 18, pp. 482, 483.

COST OF TREATING ORES AT ALMADEN. Min. & Sci. Press, vol. 37, p. 392. 2 columns; p. 408, $1\frac{1}{2}$ columns.

THE COST OF MAKING NICKEL FROM NEW CALEDONIA ORES. E. & M. J., vol. 77, p. 727. $1\frac{1}{2}$ columns.

COST OF EVAPORATING SALT FROM BRINES. E. & M. J., vol. 80, p. 532.

See also SALT MAKING.

COST OF DRESSING TIN ORE AT MOUNT BISCHOFF, TASMANIA. T. I. M. & M., vol. 14, p. 227. Table.

COST OF WASHING TIN ORE BY ROTARY PAN METHOD. P. C. M. & M. Soc. S. A., vol. 8, p. 177. Table.

COST OF TIN ORE DRESSING IN CORNWALL. E. & M. J., vol. 40, p. 416. 2 columns.

COST OF TREATING ORE AT SASATAGANI MINE, JAPAN. M. & M., vol. 18, pp. 105, 106.

COST OF ORE DRESSING IN SAXONY. Sch. Mines. Quart., vol. 15, p. 134. 1 page.

See also CONCENTRATION, and COST OF MINING AND TREATMENT.

Cost of Operating Elevators and Conveyors

FIRST COST OF CONVEYORS AND COST OF MAINTENANCE OF SAME. The Mechanical Handling of Material, p. 92. Table.

COST OF LOADING VESSELS BY RIGGS ELEVATOR. The Mechanical Handling of Material, p. 267.

COST OF LOADING VESSELS BY WALL'S DEVICE. The Mechanical Handling of Material, p. 363.

COST OF ELEVATING ORE BY BUCKET ELEVATOR, CARTHAGE, MISSOURI. Min. & Sci. Press, vol. 93, p. 76.

COST OF CONSTRUCTION AND OPERATION OF SHAKING SHUTE FOR CONVEYING ORE IN MINES, TRANSVAAL, SOUTH AFRICA. Min. Mag., vol. 12, p. 277. Table.

COST AND POWER REQUIRED TO OPERATE A BELT ELEVATOR. E. & M. J., vol. 76, p. 236.

See also ELEVATORS.

Cost of Ores and Metals

DETERMINATION OF COST OF ORE. T. L. S. M. I., vol. 6, p. 15.

PRICE PAID FOR ORE (GOLD) ACCORDING TO ASSAY VALUE. Min. & Sci. Press, vol. 27, p. 409. Table.

VALUE OF ORES AND ROYALTY PAID, GEM LODGE, IDAHO SPRINGS. M. & M., vol. 27, p. 72. Table.

ORE PRICES IN COLORADO. Min. & Sci. Press, vol. 19, p. 306.

COST OF IRON ORES AT DULUTH. T. A. I. M. E., vol. 16, p. 199.

LAKE SUPERIOR IRON-ORE PRICES. E. & M. J., vol. 84, p. 1110. $1\frac{1}{2}$ columns.

PRICES PAID FOR SILVER-LEAD ORES. Min. & Sci. Press, vol. 87, p. 222. $\frac{1}{2}$ column.

ZINC-LEAD ORES IN COLORADO, MARKET AND PENALTIES. Min. & Sci. Press, vol. 77, p. 304. $\frac{1}{2}$ column.

COST OF RARE METALS PER POUND. M. & M., vol. 19, p. 382. Table.

THE PRICE OF PLATINUM. E. & M. J., vol. 82, p. 745. $1\frac{1}{2}$ columns.

PRICE AND COSTS OF MALAY TIN ORES. Tin Deposits of the World, p. 60.

See also VALUE OF ORE AND ITS DETERMINATION.

Cost of Packing and Portage

COST OF HAULING AND PACKING SUPPLIES FOR THE PLACER MINES IN BOISE BASIN, IDAHO. E. & M. J., vol. 68, p. 395.

FREIGHTING FROM MINE TO RAILROAD, IDAHO. M. & M., vol. 22, p. 204. Table.

COST OF PACKING BY MULES, DONKEYS AND LLAMAS IN BOLIVIA. T. I. M. & M., vol. 7, p. 87. Table.

COST OF PACKING ORE ON HORSE-BACK. E. & M. J., vol. 76, p. 817.

COST OF PACKING THE FIRST OF THE ORE PRODUCED IN ASPEN, COLORADO: Which was done by "Burrows" or "Jacks." T. A. I. M. E., vol. 17, p. 159.

For other FREIGHT RATES see same reference.

COST OF PACKING BY MULES, DONKEYS AND LLAMAS, BOLIVIA, SOUTH AMERICA. Tin Deposits of the World, p. 121. Table.

COST OF MULE HAULAGE. Miner's Pocket Book, Lock, p. 282. Table.

See also PORTAGE, PACKING AND FLUMING.

Cost of Pipe and Pipe Laying

COST OF LAYING WOOD PIPE. E. & M. J., vol. 84, p. 15. $\frac{1}{2}$ column.

COST OF WOODEN AND STEEL PIPES AND FLUMES. Min. & Sci. Press, vol. 89, p. 176. Tables.

COST OF LAYING A SUBMERGED CAST IRON PIPE. Eng.-Cont., vol. 27, p. 61. $1\frac{1}{2}$ columns. I.

COMPARATIVE COST OF CAST IRON AND STEEL PIPE. Min. & Sci. Press, vol. 72, p. 421. $\frac{1}{2}$ column.

COST OF PIPE LINE CONSTRUCTION. E. & M. J., vol. 76, p. 541.

PRICES OF WROUGHT-IRON LAP-WELDED, STEEL-SOCKETED TUBES. Well-Boring, C. Isler, p. 65. Table.

COST OF PIPE (WATER) IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 139, 140.

COST OF LAYING LARGE SLIP-JOINT PIPE FOR HYDRAULIC IN COLORADO. Min. & Sci. Press, vol. 93, p. 688. Table.

See also HYDRAULIC MINING.

COST OF 5-, 2 $\frac{1}{2}$ - AND 1 $\frac{1}{2}$ -INCH IRON PIPE (FOR AIR SERVICE). T. A. I. M. E., Albany Meeting, Feb., 1903, p. 4. Table.

COST OF PIPES (PIPING) ON THE RAND, 1902. Witwatersrand Gold-fields, p. 458. Table.

COST OF 4-INCH FLANGED WROUGHT IRON PIPE. M. & M., vol. 25, p. 544. Table.

COST, LIFE, AND CAPACITY OF CONSPICUOUS TYPES OF PRESSURE PIPES. Columbia Engineer, 1898-'99, p. 117. Table.

COST OF IRON-PIPE AND WOODEN-BOX CULVERTS. R. R. Construction, Webb, p. 400. Table.

COST OF THAWING WATER PIPES BY ELECTRICITY. Eng.-Cont., vol. 27, p. 125.

See also PIPES AND PIPE FITTINGS, and COST OF EXCAVATING.

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COST OF AN INDICATED HORSE-POWER. Min. & Sci. Press, vol. 69, p. 137. $\frac{1}{2}$ column.

94 COST OF MINING, MILLING, METALLURGY, ETC.

- COST OF POWER IN CALIFORNIA.** Min. & Sci. Press, vol. 91, p. 441. 1 column.
- COST OF SMALL POWER PLANTS.** E. & M. J., vol. 76, p. 360.
- THE COST OF POWER.** E. & M. J., vol. 71, p. 716.
- MAN POWER AND ITS COST.** Min. & Sci. Press, vol. 84, p. 18. $\frac{1}{2}$ column.
- COST OF POWER AS RELATED TO LOAD FACTOR.** J. W. Soc. E., vol. 14, p. 241. 21 $\frac{1}{2}$ pages. D.
- THE COST OF POWER.** J. C. M. & M., Soc. S. A., vol. 7, p. 314. 1 column.
- COST OF POWER PER HORSE-POWER DAY.** Min. & Sci. Press, vol. 101, p. 615. Note.
- POWER COST AT THE ELY MILL, NEVADA.** M. & M., vol. 29, p. 172. Table.
- POWER COST IN RAND MINES.** E. & M. J., vol. 85, p. 548. 3 columns.
- ECONOMY BY SUBDIVISION IN INSTALLATION AND OPERATION OF POWER AND MACHINERY UNDER VARYING DEMANDS: Loss Resulting from Working Machines at Under Capacity.** By J. L. Hornig. E. & M. J., vol. 36, p. 16. 1 column.
- COST OF POWER: Factors to be Considered.** Min. & Sci. Press, vol. 89, p. 51. $\frac{1}{2}$ column.
- COST PER HORSE-POWER PER YEAR.** E. & M. J., vol. 69, p. 324.
- COST OF POWER IN A LARGE STORE BUILDING IN PITTSBURG.** P. E. Soc. W. Pa., vol. 11, p. 330. 2 pages.
- MEMORANDA RELATING TO THE BOILER ACCOUNT AS KEPT DURING THE CONSTRUCTION OF THE EDGAR THOMSON STEEL WORKS.** By P. Barnes. T. A. I. M. E., vol. 6, p. 525.
- FIRST COST OF POWER PLANT FOR 300-TON MILL, JOPLIN DISTRICT.** E. & M. J., vol. 86, p. 328. Table.
- LOW COST OF STEAM POWER IN NEW ENGLAND.** Min. & Sci. Press, vol. 75, p. 364. 1 column.
- COST OF STEAM HORSE-POWER PER ANNUM IN THE WEST.** E. & M. J., vol. 82, p. 212.
- See also **STEAM BOILERS AND POWER PLANTS.**
- COST OF STEAM-POWER.** Kent's Mech. Engr's Pocket Book, p. 790. Table.
- DECREASING COST OF STEAM PRODUCTION.** M. & M., vol. 18, p. 333. $\frac{1}{2}$ column.
- COST OF STEAM AT PORTLAND MINE.** T. A. I. M. E., Feb., 1906, p. 1304. Table.
- SAVING IN COST BY THE UTILIZATION OF EXHAUST STEAM.** T. I. M. E., vol. 24, p. 339.
- COST OF FIRING BOILERS WITH AND WITHOUT MECHANICAL DRAFT.** Columbia Eng., 1898-'99, pp. 30, 31, 33, 34, 35.
- MECHANICAL VS. HAND STOKING COSTS.** Min. & Sci. Press, vol. 88, p. 181. $\frac{1}{2}$ column. Table.
- See also **MECHANICAL FEEDERS FOR STEAM BOILERS.**
- COST OF STEAM RAISING.** By J. Holliday. Engineering, London, vol. 68, p. 739. 4 columns.
- COST OF STEAM AT THE PORTLAND MINE, COLORADO.** T. A. I. M. E., vol. 37, p. 96. Table.
- COST OF POWER GENERATION: Comparative Costs by Steam, Water and Gas Engines.** By J. B. C. Kershaw. Engineering, London, vol. 70, pp. 351, 390. 3 columns.
- COST AND SAVING OF STEAM PIPE COVERINGS.** E. & M. J., vol. 81, p. 572.
- COMPARATIVE COST OF STEAM AND WATER POWER.** E. & M. J., vol. 47, p. 502. 2 $\frac{1}{2}$ columns.
- RELATIVE COST OF WATER AND STEAM POWER.** Min. & Sci. Press, vol. 30, p. 35. $\frac{1}{2}$ column.
- COST OF WATER HORSE POWER PER YEAR.** Min. & Sci. Press, vol. 83, p. 181.
- COST OF RUNNING ELECTRIC-PLANT.** T. A. I. M. E., vol. 20, p. 366.

- COST OF ELECTRICAL POWER PER TON IN THE BLACK HILLS. Min. & Sci. Press, vol. 92, p. 53. $\frac{1}{2}$ column.
- COST OF GENERATING STATIONS COMPLETE. Engineering, London, vol. 77, p. 773. Table.
- COST OF ELECTRIC MOTORS VS. STEAM ENGINES. E. & M. J., vol. 50, p. 160. 1 column.
- COST OF ELECTRICAL POWER IN UNITED STATES AND CANADA. California Miners' Assoc., Ann., 1906, p. 53. $\frac{1}{2}$ page.
- COST OF ELECTRICITY PER KILOWATT HOUR. California Miners' Assoc., Ann., p. 109.
- COST OF AN ELECTRICAL INSTALLATION IN A COLLIERY: English Practice. T. F. I. M. E., vol. 7, p. 129. Table.
- COST OF ELECTRIC POWER AT GOLDFIELD, NEVADA. E. & M. J., vol. 82, p. 342. Table.
- COST OF ELECTRICITY PER KILOWATT HOUR. Min. Mag., vol. 12, p. 369. Table.
- COST OF ELECTRIC POWER. By Louis Ball. Electrochemical Industry, Aug., 1904. $1\frac{1}{2}$ columns.
Min. Mag., Oct.-Nov., 1904, p. 297.
- POWER COSTS: Electricity, Steam, Gas, etc. Min. & Sci. Press, vol. 93, p. 757. $\frac{1}{2}$ column.
- COST OF ELECTRIC POWER AT JOPLIN. E. & M. J., vol. 80, p. 64. $\frac{1}{2}$ column.
- COST OF AN ELECTRICAL UNIT AT A COLLIERY. By P. C. Greaves. T. I. M. E., vol. 32, p. 363. 22 pages.
- COST OF ELECTRICITY AT VIRGINIA CITY, NEVADA. E. & M. J., vol. 76, p. 851.
- COST OF ELECTRIC POWER, SILVER LAKE, COLORADO. E. & M. J., vol. 76, p. 307.
- COMPARATIVE COSTS OF ELECTRICAL POWER. Min. & Sci. Press, vol. 81, p. 402. Table.
- COST OF ELECTRIC VS. WATER POWER. Min. & Sci. Press, vol. 74, p. 233. Table.
- COST OF ELECTRICAL POWER PLANT. E. & M. J., vol. 74, p. 743. $\frac{1}{2}$ column.
- COST OF ELECTRIC PLANT OPERATION, PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Feb., 1906, p. 1305. Table.
- COST OF ELECTRICAL POWER: Smuggler-Union. E. & M. J., vol. 76, p. 118.
- COST OF A HORSE POWER HOUR IN DIFFERENT SORTS OF MOTORS. Min. & Sci. Press, vol. 82, p. 94.
- COST OF ELECTRIC POWER, RAND MINES. E. & M. J., vol. 85, p. 550. 3 columns.
- SYSTEMS OF CHARGING FOR ELECTRICAL ENERGY. By W. T. Ryan. Min. & Sci. Press, vol. 98, p. 694. $3\frac{1}{2}$ columns.
- COST OF ELECTRIC POWER. Min. & Sci. Press, vol. 85, p. 217.
- COST OF ELECTRIC POWER. E. & M. J., vol. 80, p. 640. $\frac{3}{4}$ columns.
- COMPARATIVE COST OF PLANTS PER HORSE POWER TRANSMITTED: Electricity, Hydraulic, Pneumatic and Wire Rope. Miners' Pocket Book, Lock, pp. 120, 121, 294 and 295. Tables.
- COST OF ELECTRICAL INSTALLATION COMPARED WITH STEAM. E. & M. J., vol. 80, p. 357.
- COST OF ELECTRICAL POWER IN COLLIERIES. Coll. Eng., vol. 8, p. 225. Tables.
- COST OF ELECTRICAL TRANSMISSION. T. F. I. M. E., vol. 8, p. 256.
- COST OF WIRES FOR ELECTRICAL TRANSMISSION. E. & M. J., vol. 69, p. 81.
- COST OF COMPLETE ELECTRIC PLANT FOR TRANSMISSION OF POWER VARIOUS DISTANCES. T. A. I. M. E., vol. 16, p. 854.

COST OF AN ELECTRICAL PLANT TO TRANSMIT 100 HORSE POWER FIVE MILES. T. F. I. M. E., vol. 3, p. 288. Tables.

See also THE ELECTRIC POWER PLANT AND ITS EQUIPMENT.

COST OF ELECTRICAL TRANSMISSION. Miners' Pocket Book, Lock, pp. 110, 111, 113. Table.

See also POWER TRANSMISSION, ETC.

RELATIVE COSTS OF TRANSMISSION OF POWER. Min. & Sci. Press, vol. 61, p. 72. $\frac{1}{2}$ column.

COST OF AN 18 $\frac{1}{2}$, 13 $\frac{1}{2}$ AND 6 $\frac{1}{2}$ INCH THREE-STAGE AIR COMPRESSOR, NORWALK, STRAIGHT-LINE. T. A. I. M. E. Feb., 1903, p. 4. Table.

SAVING IN COST BY INTRODUCING CENTRAL COMPRESSED AIR PLANT. M. & M., vol. 25, p. 161. $\frac{1}{2}$ column.

COST OF COMPRESSING AIR, PORTLAND MINE. T. A. I. M. E., Feb., 1906, p. 1305. Table.

COST OF AIR COMPRESSION. E. & M. J., vol. 59, p. 101.

COST OF ELECTRICITY VS. COMPRESSED AIR. E. & M. J., vol. 75, p. 669. Table.

COST OF COMPRESSED AIR HAULAGE PLANT. M. & M., vol. 25, p. 569. $\frac{1}{2}$ column.

COST OF COMPRESSED AIR IN TERMS OF INDICATED HORSE POWER. T. N. S. I. M. & M. E., vol. 9, p. 51. Table.

COST OF CONSTRUCTION OF A COMPRESSED AIR POWER STATION. P. E. Soc. W. Pa., vol. 13, p. 188. Table.

COST OF OPERATING A COMPRESSED AIR MOTOR, AS COMPARED WITH MULE HAULAGE. M. & M., Sept. 1903, p. 77.

COST OF POWER FOR OPERATING VARIOUS FORMS OF AIR COMPRESSORS. M. & M., vol. 27, p. 102. Table.

COST OF VARIOUS FORMS OF AIR COMPRESSORS. M. & M., vol. 27, p. 102. Table.

COST OF COMPRESSED AIR, PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 97. Table.

MACHINE AIR COST ON THE RAND. P. C. M. & M. Soc. S. A., vol. 10, p. 280. 1 column.

COST OF VARIOUS FORMS OF COMPRESSED AIR INSTALLATIONS. E. & M. J., vol. 86, p. 229. 1 $\frac{1}{2}$ columns.

COMPARATIVE COSTS OF COMPRESSING AIR WITH STEAM AND ELECTRICITY AT ROSSLAND, BRITISH COLUMBIA. By Wm. Thompson. J. C. M. I., vol. 6, p. 180. 8 pages.

COST OF COMPRESSED AIR VS. HYDRAULIC POWER. T. N. S. I. M. & M. E., vol. 9, p. 330. Table.

THE COST OF LEAKAGE IN COMPRESSED AIR PLANTS. J. C. M. & M. Soc. S. A., vol. 7, p. 308. 1 column.

See also COMPRESSED AIR IN MINING.

COST OF LIQUID AIR. E. & M. J., vol. 81, p. 284.

COST OF OPERATING GAS ENGINES. Min. & Sci. Press, vol. 82, p. 292.

RELATIVE COSTS OF GAS AND STEAM PLANTS. Min. & Sci. Press, vol. 89, p. 327. Table.

COST OF GAS POWER. By C. E. Lucke. Sch. Mines Quart., vol. 30, p. 199. 18 pages.

COST OF MANUFACTURE OF ILLINOIS GAS. E. & M. J., vol. 76, p. 507.

COST OF GASOLINE PUMP FOR IRRIGATION OR MINE USE. E. & M. J., vol. 80, p. 296.

COST OF AN OIL-ENGINE FOR UNDERGROUND USE. T. I. M. E., vol. 18, p. 399.

COST OF PRIESTMAN OIL ENGINE PER HOUR. T. F. I. M. E., vol. 3, p. 262. Table.

See also POWER, ETC., and GAS AND OIL ENGINES.

Cost of Producing Various Materials

PERCENTAGE SUBDIVISION OF COST OF PRODUCING MINERAL: Cost per Ton; Mining Plant, etc.; Labor, Supplies, etc.; Timber, Maintaining Workings etc.; Milling, etc.; and Management, etc. T. A. I. M. E., California Mines and Minerals, p. 64.

COST OF PRODUCTION OF TRINIDAD ASPHALT. Min. & Sci. Press, vol. 66, p. 262.

COST OF PRODUCING CHINA CLAY. E. & M. J., vol. 79, p. 1080.

COST OF PRODUCTION AND PROFITS PER TON COAL, BELGIUM. E. & M. J., vol. 74, p. 706.

COST OF MINING ANTHRACITE COAL. E. & M. J., vol. 77, p. 592. 1 column.

See also **THE COAL TRADE.**

COST OF PRODUCING COPPER PER TON. E. & M. J., vol. 30, p. 108. Table.

COST OF PRODUCING COPPER AT CALUMET AND HECLA MINES. E. & M. J., vol. 40, p. 420. 2 columns.

COST OF PRODUCING LAKE COPPER. Min. & Sci. Press, vol. 83, p. 75.

COST OF CANANEA COPPER. Min. & Sci. Press, vol. 83, p. 86.

COST OF COPPER AT ATLANTIC MINE. Min. & Sci. Press, vol. 83, p. 86.

REASON FOR DIFFERENCE IN COST IN LAKE SUPERIOR. Min. & Sci. Press, vol. 83, p. 118.

COST OF PRODUCING A TON OF COPPER. M. & M., vol. 28, p. 526. $\frac{1}{2}$ column.

THE COST OF PRODUCING COPPER IN ARIZONA. By J. R. Finlay. E. & M. J., vol. 86, p. 37. $5\frac{1}{2}$ columns. I.

COSTS AND PROFITS OF PRODUCTION OF ARIZONA COPPER. Min. & Sci. Press, vol. 43, p. 134. $1\frac{1}{2}$ columns.

COST OF PRODUCING COPPER. E. & M. J., vol. 86, p. 76. 2 columns.

COST OF PRODUCING THE WORLD'S SUPPLY OF COPPER. By J. R. Finlay. E. & M. J., vol. 86, p. 165. $9\frac{1}{2}$ columns.

OFFICIAL REPORTS OF COSTS OF PRODUCING COPPER. By A. R. Townsend. E. & M. J., vol. 86, p. 555. 11 columns.

See also **THE COPPER TRADE.**

COST OF ORE-PRODUCTION IN SOUTH AFRICA. E. & M. J., vol. 76, p. 121

COST OF GOLD PRODUCTION. E. & M. J., vol. 61, p. 395. $1\frac{1}{2}$ columns.

WHAT IS THE COST OF PRODUCING GOLD AND SILVER? E. & M. J., vol. 51, p. 437. $\frac{1}{2}$ column.

COST OF PRODUCTION IN THE REPUBLIC DISTRICT, WASHINGTON. E. & M. J., vol. 74, p. 74.

See also **THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING.**

COST OF PRODUCING OLD RANGE IRON (BESSEMER) ORES. E. & M. J., vol. 83, p. 717.

COST OF PRODUCTION OF IRON. T. A. I. M. E., vol. 17, p. 123.

COST OF PRODUCTION OF ORE (IRON) IN LAKE SUPERIOR REGION. M. & M., vol. 19, p. 413.

See also **THE IRON TRADE.**

COST OF PRODUCING BRAZILIAN MICA. T. I. M. & M., vol. 12, p. 357. Table.

COST OF PRODUCTION OF LOW-GRADE PHOSPHATE-ORES, CANADA. T. A. I. M. E., vol. 21, pp. 179, 183, 184, 185.

COSTS AND PROFITS IN SILVER-LEAD ORE PRODUCTION. By J. R. Finlay. E. & M. J., vol. 85, p. 1279. 11 columns.

THE COST OF PRODUCING SILVER. E. & M. J., vol. 55, p. 146. $1\frac{1}{2}$ columns.

THE COST OF PRODUCING SILVER. Min. & Sci. Press, vol. 66, p. 114. 1 column.

THE COST OF SILVER. Min. & Sci. Press, vol. 66, p. 166. 1 column.

THE PRICE OF SILVER. Min. & Sci. Press, vol. 66, p. 196. 1½ columns.

COST OF PRODUCTION OF SILVER. Min. & Sci. Press, vol. 67, p. 34. 1 column.

WHERE SILVER IS PRODUCED AT A COST OF 23 CENTS PER OUNCE. Min. & Sci. Press, vol. 77, p. 451. ½ column.

See THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING.

COST OF SULPHUR PRODUCTION IN SICILY. E. & M. J., vol. 20, p. 408.

Cost of Preserving Mine Timber

COST OF PRESERVING TIMBERS BY VARIOUS METHODS. R. R. Construction, Webb, p. 229. 2 pages.

COST OF TREATMENT OF TIMBER FOR USE IN MINES. T. F. I. M. E., vol. 10, p. 533.

PROTECTING STEEL FROM CORROSION. By R. B. Woodworth. Min. & Sci. Press, vol. 99, p. 560. 1½ columns.

See also PRESERVATION OF MINE TIMBER.

Cost of Prospecting

COST OF PROSPECTING WITH A KEYSTONE DRILL FOR COPPER IN NEVADA. E. & M. J., vol. 83, p. 804. ¾ column.

COST OF PROSPECTING WITH CHURN DRILL. Min. & Sci. Press, vol. 93, p. 786. Table.

COST OF PROSPECTING IN ZINC FIELDS OF WISCONSIN. E. & M. J., vol. 81, p. 1233. 2 columns.

COST OF CHURN-DRILL PROSPECTING. E. & M. J., vol. 80, pp. 920, 921 and 922.

COST OF CHURN AND DIAMOND DRILLING IN MISSOURI. E. & M. J., vol. 80, p. 244.

COST OF DIAMOND DRILL PROSPECTING UNDERGROUND AT THE ESPERANZA MINE, EL ORO, MEXICO. Min. & Sci. Press, vol. 99, p. 825. Table.

COST OF PROSPECTING BY DIAMOND DRILL. The Witwatersrand Goldfields, pp. 147, 148.

COST OF TEST DRILLING ON MISABI RANGE. E. & M. J., vol. 75, p. 896.

COST OF TEST DRILLING ON VERMILION IRON RANGE. E. & M. J., vol. 75, p. 966.

COST OF PROSPECTING AURIFEROUS GRAVEL DEPOSITS BY DRILL. Min. & Sci. Press, vol. 80, p. 120.

COST OF PROSPECT DRILLING IN ALLUVIAL DEPOSITS AT OROVILLE, CALIFORNIA. T. I. M. & M., vol. 12, p. 459. Table.

See also COST OF DRILLING AND BORING.

COST OF PROSPECTING FOR DREDGING. E. & M. J., vol. 85, p. 1087. ¾ column.

See also PROSPECTING, ETC.

Cost of Pumping and Bailing

COMPARATIVE COST OF RAISING WATER BY DIFFERENT SYSTEMS IN THE TRANSVAAL. T. I. M. & M., vol. 16, p. 230. Table.

THE COST OF PUMPING AT THE SHORT MOUNTAIN COLLIERY OF THE LYKENS VALLEY COAL COMPANY. By R. V. Norris. T. I. M. E., vol. 34, p. 106.

COST OF PUMPING PLANT AND RUNNING EXPENSES AT SIERRA MOJADA, MEXICO. T. A. I. M. E., vol. 15, p. 570.

COST OF PUMPING AT LEADVILLE, COLORADO. Min. & Sci. Press, vol. 82, p. 282. Table.

COST OF PUMPING ON THE RAND. Witwatersrand Goldfields, p. 269.

COST OF DAVEY DIFFERENTIAL PUMP AT THE C. & C. SHAFT, COMSTOCK LODGE, NEVADA. Min. & Sci. Press, vol. 90, p. 74.

COST OF PUMPING ON THE COMSTOCK.
E. & M. J., vol. 82, p. 1210.

COST OF PUMPING WITH COMPRESSED AIR. T. F. C. M. I., vol. 2, p. 229.

See also COMPRESSED AIR PUMPING.

COST OF CORNISH PUMP WORK ON THE RAND. Gold Mines of the Rand, p. 172. Table; p. 259.

COST OF PUMPING AT GALENA, KANSAS:
Cornish and Steam Pump Work.
Univ. Geol. Sur. of Kans., vol. 8,
p. 346. 3 pages.

See also CORNISH PUMPS.

COST OF PUMPING AT THE SHORT MOUNTAIN COLLIERY OF THE LYKENS VALLEY COAL COMPANY IN DAUPHIN COUNTY, PENNSYLVANIA. By R. V. Norris. M. & M., Vol. 23, p. 413. 3 columns.

COST OF PUMPING BY ELECTRICITY.
E. & M. J., vol. 47, p. 545. Table.

COST OF PUMPING BY STEAM PUMPS.
Miner's Pocket Book, Lock, pp. 330,
331, 332. Table.

COST OF ELECTRICAL PUMP WORK.
Miner's Pocket Book, Lock, p. 333.
Table.

COST OF ELECTRIC PUMPING IN COLLIERIES. Min. & Sci. Press, vol. 56,
p. 135. $\frac{1}{2}$ column.

COMPARATIVE COST OF ELECTRIC AND STEAM PUMPING. Min. & Sci. Press,
vol. 63, p. 2. 1 column.

See also ELECTRICALLY DRIVEN PUMPS,
and PUMPS FOR MINE USE.

EXPENSE OF PUMPING WATER BY WINDMILL. E. & M. J., vol. 33,
p. 260. Tables.

THE COST OF BAILING. Min. & Sci. Press, vol. 90, p. 201. 2 columns.

COST OF PUMPING AND BAILING IN THE DEEP LEVEL MINES OF THE RAND. M. & M., vol. 26, p. 475. Table.

COST OF WINDING WATER. T. F. I. M. E., vol. 13, p. 81.

See also BAILING WATER, and PUMPS
FOR MINE USE.

Cost of Reduction

COST OF STAMP-MILLING. T. A. I. M. E., vol. 23, p. 567.

COST OF STAMP MILLING. Min. & Sci. Press, vol. 81, p. 560. Table.

COST PER TON OF ROCK STAMPED:
Iron Ore. T. A. I. M. E., vol. 21,
pp. 548, 549.

ECONOMY IN AUTOMATIC ORE FEEDERS.
Min. & Sci. Press, vol. 87, p. 19.

COST OF HAND VS. MACHINE FEEDING STAMP BATTERIES, GILPIN COUNTY, COLORADO. E. & M. J., vol. 54,
p. 246.

COMPARATIVE COST OF STAMPS AND ROLLS. T. I. M. & M., vol. 7, p. 141. Tables.

COST OF STAMPING IN AUSTRALIA. E. & M. J., vol. 36, p. 182. $\frac{1}{2}$ column.

COST OF ERECTING A STAMP MILL—20 STAMPS, SOUTH AFRICA. Min. & Sci. Press, vol. 90, p. 105. Table.

COMPARISON OF CURRENT COSTS PER TON OPERATING WITH 10 AND 20 STAMPS. Min. & Sci. Press, vol. 76,
p. 177. Table.

COST OF SHOES AND DIES OF DIFFERENT MATERIAL. Min. & Sci. Press,
vol. 89, p. 224.

COST AND WORKING-RESULTS OF SHOES AND DIES OF DIFFERENT MATERIALS.
T. A. I. M. E., vol. 35, p. 594. Table.

See also STAMP MILL PRACTICE.

COST OF WEAR OF STAMPS AND ROLLS.
E. & M. J., vol. 37, p. 461.

COST OF WEAR OF ROLL SHELLS AND PULVERIZERS ON THE RAND. T. I. M. & M., vol. 7, p. 135. Table.

See also ROLLS: Construction and Operation.

COST OF DRY CRUSHING. Gold Min. & Mill. W. Aus., p. 247.

COST OF DRY CRUSHING MILLS. J. C. & M. Soc., S. A., vol. 1, p. 815.

COSTS OF DRY CRUSHING. Gold Min. & Mill. W. Aus., pp. 245, 248. Table.

100 COST OF MINING, MILLING, METALLURGY, ETC.

COST OF MILL SPARES: Dies, Shoes, Cams, Cam-Shafts, Stems, etc. *Gold Min. & Mill. W. Aus.*, p. 456. Table.

COST OF FINE GRINDING IN WESTERN AUSTRALIA. By W. Broodbridge. *Min. Mag.*, Feb., 1905, p. 175.

COST OF OPERATING HUNTINGTON MILL. *Gold Min. & Mill. W. Aus.*, pp. 220, 222. Tables.

COST OF CRUSHING WITH BALL MILL. *Gold Min. & Mill. W. Aus.*, p. 247.

COST OF OPERATING TUBE MILLS ON GOLD ORES. *Min. Mag.*, vol. 11, pp. 411, 412, etc.

COST OF GRINDING BY TUBE-MILLS AT EL ORO, MEXICO. *T. A. I. M. E.*, vol. 37, p. 23. 1 page. Tables.

COST OF TUBE MILL OPERATION. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 12. 1 column.

COST OF REDUCING BY TUBE-MILL. *P. C. M. & M. Soc. S. A.*, vol. 6, p. 314. Note.

COST OF TUBE MILL WORK AT THE COMBINATION MINE, GOLDFIELD, NEVADA. *M. & M.*, vol. 27, pp. 298 and 299. $\frac{1}{2}$ column.

COST OF TUBE-MILL LINING. *Min. & Sci. Press*, vol. 93, p. 108. Table.

See also FINE CRUSHING BY MILLS, ETC.

COST OF CRUSHING, WESTERN AUSTRALIA. *Gold Min. & Mill. W. Aus.*, p. 248.

COMMUNICATION ON THE COST OF CRUSHING HARD HEMATITES. *T. L. S. M. I.*, vol. 3, p. 93. 1 page.

See also CRUSHERS, ETC.

COST OF BREAKING ORE BY MACHINERY WITH A 100-TON CAPACITY PLANT. *E. & M. J.*, vol. 39, p. 296. Table.

COST OF REDUCTION OF ORE: Nevada and California. *Min. & Sci. Press*, vol. 18, p. 345. Table.

COST OF REDUCTION OF GOLD-ZINC SLIMES. *Min. & Sci. Press*, vol. 75, p. 123. Table.

COST OF CRUSHING AND SEPARATING COPPER ORES AT THE ATLANTIC MINE, MICHIGAN. *E. & M. J.*, vol. 55, p. 53. $\frac{1}{2}$ column.

COST OF CRUSHING OXIDIZED ORE AT MOUNT MORGAN IN BALL MILLS AND ROLLS. *E. & M. J.*, vol. 74, p. 50. Table.

COST OF REDUCTION OF GOLD AND SILVER ORES. *Min. & Sci. Press*, vol. 30, p. 414.

COST OF REDUCTION IN A SILVER-MILL. *T. A. I. M. E.*, vol. 11, p. 100.

COST OF LOSS OF COAL BY BREAKAGE IN STORAGE BINS. *E. & M. J.*, vol. 84, p. 645.

See also THE REDUCTION OF ORES, ETC.

Cost of Rope

COST OF LANG'S LAY WINDING-ROPES. *P. C. M. & M. Soc. S. A.*, vol. 7, p. 189. Table.

COST OF WIRE ROPE FOR TON COAL HAULED. *Second Geol. Sur. Pa.*, A. C., p. 261. Table.

See also ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPES, ETC.

Charges, Royalties, Taxes, etc.

MINT CHARGES. *Min. & Sci. Press*, vol. 90, p. 409. Table.

MINT CHARGES. *E. & M. J.*, vol. 38, p. 348. 2 columns.

ROYALTIES PAID BY LEASES AT GOLDFIELD, NEVADA. *Min. & Sci. Press*, vol. 90, p. 151.

CORNISH MINES AND THE ROYALTIES THEY PAY. *Min. & Sci. Press*, vol. 67, p. 86. $\frac{3}{4}$ column.

RATE OF ROYALTY IN THE DEEP ALLUVIAL WORKINGS OF AUSTRALIA. *T. I. M. & M.*, vol. 7, p. 110.

ROYALTIES IN RHODESIA. *Min. & Sci. Press*, vol. 89, p. 255. $\frac{1}{2}$ column.

MEXICAN TAXATION ON BULLION: Costs and Charges. E. & M. J., vol. 75, p. 410. 1 column.

COST OF OBTAINING A MINING CONCESSION IN MEXICO. Min. & Sci. Press, vol. 88, p. 92.

See also **RATING AND TAXATION.**

Cost of Sampling

COST OF SAMPLING AT HAILEY, IDAHO. M. & M., vol. 22, p. 204. Table.

COST OF SAMPLING ORES BY MACHINES. T. A. I. M. E., vol. 20, p. 440.

See also **SAMPLING OF MINES.**

Cost of Shaft Sinking

COST OF SHAFT SINKING. E. & M. J., vol. 83, p. 387. 1½ columns.

COST OF SHAFT-SINKING (CIRCULAR SHAFT). E. & M. J., vol. 81, p. 1198.

COST OF SINKING THROUGH MODERATELY HARD MATERIAL: In Coal Mines. M. & M., vol. 24, p. 144.

COST OF SHAFT-SINKING WITH ROCK-DRILLS. T. F. I. M. E., vol. 8, p. 20.

COST OF SINKING CIRCULAR SHAFT. T. I. M. E., vol. 38, p. 28. Table.

COST OF SHAFT-SINKING WITH SMALL MACHINES. Min. & Sci. Press, vol. 93, p. 448. Table.

COST OF SHAFT-SINKING. Min. & Sci. Press, vol. 74, p. 416. ½ column.

RATE OF SHAFT SINKING AND COST. The Witwatersrand Goldfields, p. 189. 5 pages.

SPEED AND COST OF SINKING SHAFTS. Second Geol. Sur. Pa., A. C., p. 73. 1 page.

COST OF SINKING. E. & M. J., vol. 47, p. 11. Table.

ESTIMATED COST OF SINKING SHAFT. M. & M., vol. 30, p. 256. 2 columns.

COMPARATIVE COST OF SHAFT SINKING. Min. & Sci. Press, vol. 88, p. 224. ½ column.

ESTIMATED COST OF SHAFT SINKING. P. C. M. & M. Soc. S. A., vol. 10, p. 412. Tables.

COST OF SHAFT SINKING. M. & M., vol. 29, p. 518. ½ column. Tables.

COST OF SINKING AN INCLINED SHAFT. M. & M., vol. 31, p. 728. Table.

COST OF CEMENTATION IN SHAFT-SINKING. E. & M. J., vol. 86, p. 222. Table.

COST OF SHAFT SINKING BY CEMENTATION AND FREEZING SYSTEMS. T. I. M. E., vol. 31, p. 122. Table.

COST OF SHAFT SINKING BY THE KIND-CHAUDRON METHOD, ENGLAND. P. C. M., vol. 2, pp. 201, 204, 205, 206. Tables.

RECORD AND COST OF SHAFT SINKING BY THE KIND-CHAUDRON METHOD. E. & M. J., vol. 81, p. 862.

COST OF SINKING DROP SHAFT THROUGH 35-FOOT STRATUM OF QUICKSAND. E. & M. J., vol. 81, p. 134. Table.

COST OF SINKING THROUGH LOOSE MATERIALS, EUROPE. P. C. M., vol. 2, pp. 210, 212, 217. Tables.

COST BY FREEZING PROCESS. P. C. M., vol. 2, pp. 227, 228, 230.

COST OF SINKING THROUGH SAND AND GRAVEL BY USE OF TUBBINGS, ENGLAND. T. I. M. E., vol. 38, p. 320. Table.

COST OF SINKING A SHAFT WITH IRON LININGS. E. & M. J., vol. 20, p. 574. Table.

See also **SHAFT LINING, and COST OF SUPPORT.**

COST OF A SINKING PLANT FOR A DEPTH OF 500 FEET. M. & M., vol. 29, p. 462. Table.

COMPARATIVE COSTS OF HAND AND MACHINE WORK IN SHAFT SINKING ON THE RAND. Witwatersrand Goldfields, pp. 194, 195, 196. Table.

See also **COST OF DRILLING AND BORING.**

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- COST OF SHAFT SINKING ON THE RAND.** T. N. S. I. M. & M. E., vol. 10, p. 135.
- NOTE ON THE COST AND SPEED OF SINKING THE EAST SHAFT OF THE NEW KLEINFONTEIN COMPANY, BENONI, SOUTH AFRICA.** By E. J. Way. T. A. I. M. E., vol. 35, p. 397. 2 pages.
- COST OF SHAFT SINKING ON THE RAND.** T. I. M. & M., vol. 15, pp. 345, 363. Tables.
- COST OF SHAFT SINKING ON THE RAND.** Witwatersrand Goldfields, pp. 189, 190, 191, 192, 193, 194. Tables.
- COST OF SHAFT SINKING AND DRIVING WINZES ON THE RAND.** Gold Mines of the Rand, p. 259. 1 page.
- COST OF SHAFT SINKING IN SOUTH AFRICA.** Sch. Mines Quart., vol. 20, p. 382. 1½ pages.
- COST OF SHAFT SINKING ON THE RAND.** Min. & Sci. Press, vol. 87, p. 217. Table.
- COST OF SHAFT SINKING IN SOUTH AFRICA.** Eng. Cont., vol. 27, p. 125. ½ column.
- COST OF SHAFT SINKING, GEORGIA.** E. & M. J., vol. 61, p. 617.
- COST OF SINKING THE EAST SHAFT OF THE NEW KLEINFONTEIN COMPANY, LIMITED.** By E. J. Way. T. I. M. & M., vol. 13, p. 102. 10 pages.
- VARIATION IN COST OF SINKING A 3900-FOOT SHAFT AT THE CINDERELLA DEEP.** E. & M. J., vol. 82, p. 1060. Table.
- SPEED AND COST OF SHAFT SINKING IN WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., p. 165. 3 pages.
- COST OF RAISING AND SINKING IN NEW SOUTH WALES.** T. I. M. & M., vol. 7, p. 151. Table.
- COST OF SHAFT SINKING AT THE VICTORIA MINE, BENDIGO, AUSTRALIA: the Deepest Gold Mine in the World, 1906.** Min. & Sci. Press, vol. 93, p. 503. ½ column.
- COST OF SHAFT SINKING, SUTTER CREEK, CALIFORNIA.** Min. & Sci. Press, vol. 84, p. 35. Table.
- COST OF SHAFT SINKING, LINCOLN MINE, CALIFORNIA.** Min. & Sci. Press, vol. 86, p. 25. Table.
- COST OF SHAFT SINKING ON THE MOTHER LODE, CALIFORNIA.** Min. & Sci. Press, vol. 93, p. 683.
- COST AND RATE OF SHAFT SINKING ON THE MOTHER LODE, CALIFORNIA.** T. A. I. M. E., California Mines and Minerals, p. 166.
- COST OF SHAFT SINKING, CENTRE STAR MINE COMPANY, BRITISH COLUMBIA: Including Compressed Air, Drill Fittings and Labor.** Miner's Pocket Book, Lock, p. 178. Table.
- COST OF SHAFT SINKING: Transvaal, South Africa.** Miner's Pocket Book, Lock, pp. 208, 209, 210. Table.
- COST OF SINKING DOMINION No. 1 SHAFT.** J. M. Soc. N. S., vol. 3, p. 111. Table.
- THE COST OF SINKING PLANT, SHAFT SINKING AND LEVEL DRIVING IN THE DEEPEST LODES YET REACHED IN THE GOLD MINES OF NOVA SCOTIA.** By W. L. Libbey. J. M. Soc. N. S., vol. 9, p. 94. 4 pages.
- COST OF SHAFT SINKING IN ENGLAND.** P. C. M., vol. 1, pp. 136, 138, 141, 151, 152, 154. Tables.
- COST OF THE SINKING OF THE SHAFTS OF SAINTE MARIE AT PIRONNES.** T. A. I. M. E., vol. 5, p. 128.
- COST OF A THREE-COMPARTMENT SHAFT AT FRISCO, IDAHO.** Min. & Sci. Press, vol. 94, p. 272.
- COST OF SHAFT SINKING IN INDIA.** T. I. M. & M., vol. 5, pp. 143 and 220.
- COST OF SHAFT SINKING AT GALENA, KANSAS.** Univ. Geol. Sur. of Kansas, vol. 8, p. 341. 1½ pages.
- COST OF SHAFT SINKING TIN MINES, MALAY PENINSULA.** T. I. M. & M., vol. 7, p. 14.
- COST OF SHAFT SINKING IN THE TIN MINES OF THE MALAY PENINSULA.** Tin Deposits of the World, p. 58.

COST OF SHAFT SINKING AT THE EL ORO MINES, MEXICO. Min. & Sci. Press, vol. 100, p. 519. Tables.

COST OF SINKING A MEXICAN SHAFT. M. & M., vol. 31, p. 275. $\frac{1}{2}$ column. Table.

COST OF SHAFT SINKING: In an American Copper Mine. Min. & Sci. Press, vol. 85, p. 9. Table.

COST OF SHAFT SINKING IN RANDOLPH COUNTY, MISSOURI. E. & M. J., vol. 86, p. 6. $1\frac{1}{2}$ columns.

DIFFICULT SHAFT SINKING, EMMA MINE, BUTTE, MONTANA. Min. & Sci. Press, vol. 84, p. 77. $\frac{1}{2}$ column.

COST OF SHAFT SINKING AT BASIN, MONTANA. E. & M. J., vol. 79, p. 1005. Table.

COST OF SHAFT SINKING AT GOLD-FIELD, NEVADA. Min. & Sci. Press, vol. 94, p. 722.

COST OF SHAFT SINKING AT GOLD-FIELD. E. & M. J., vol. 84, p. 1106. 1 column.

COST OF SHAFT SINKING AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 436. Table.

COST OF SHAFT SINKING IN WISCONSIN ZINC DISTRICT. E. & M. J., vol. 81, pp. 1233 and 1234. Table.

COST OF SHAFT SINKING IN WISCONSIN ZINC FIELDS. E. & M. J., vol. 81, p. 1234. Tables.

COST OF SHAFT SINKING IN THE POCOHONTAS COAL FIELD. M. & M., vol. 27, p. 283. Table.

COST OF SHAFT SINKING IN THE PENNSYLVANIA ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 25. 1 page.

COST OF SHAFT SINKING IN WESTERN PENNSYLVANIA. M. & M., vol. 30, p. 128. Table.

COST OF SINKING AND CRIBBING THE ATCHISON DEEP COAL SHAFT, KANSAS. E. & M. J., vol. 74, p. 109.

COST OF COLLIERY SINKING AND EQUIPMENT IN BELGIUM. T. I. M. E., vol. 31, p. 698. Table.

See also **SHAFT SINKING.**

Cost of Signaling

COST OF COMPRESSED AIR MINE SIGNALING. Min. & Sci. Press, vol. 85, p. 220. Table.

COST OF INSTALLATION OF COMPRESSED AIR SIGNALING. J. C. M. I., vol. 6, p. 167. Tables.

See also **COMPRESSED AIR, ELECTRICITY, etc., and METHODS OF SIGNALING.**

Cost of Sizing

COST OF SCREENING AND CLEANING COAL. T. F. I. M. E., vol. 1, p. 93.

COST OF SCREENING AND BANKING COAL, ENGLAND. T. N. S. I. M. & M. E., vol. 10, p. 256. Table.

COST OF SCREEN CONSTRUCTION. T. N. S. I. M. & M. E., vol. 10, p. 258. Tables.

See also **KINDS OF SCREENS, ETC.**

Cost of Sorting

ADVANTAGES OF HAND SORTING: Costs. E. & M. J., vol. 81, p. 1101.

COST OF SORTING BY HAND: Zinc Ores. Rept. Zinc Comm., Canada, p. 79. $1\frac{1}{2}$ pages.

SAVING DUE TO SORTING AT THE RAND MINES. Gold Mines of the Rand, p. 156. Table.

COST OF HAND SORTING ON THE RAND. E. & M. J., vol. 88, p. 1069. Table.

COST OF ORE SORTING, SOUTH AFRICA. Sch. Mines Quart., vol. 21, p. 24.

COST OF SORTING AND CRUSHING ON THE RAND. Gold Mines of the Rand, p. 260.

COST OF SORTING ORE AT THE HECLA MINE, CŒUR D'ALENE DISTRICT. E. & M. J., vol. 88, p. 1106. Table.

COST OF HAND SORTING VS. MILLING: Comparative Costs. Min. & Sci. Press, vol. 88, p. 41. Table.

See also **HAND DRESSING, SORTING.**

Cost of Stoping

COST OF STOPING. P. C. M. & M. Soc. S. A., vol. 7, p. 5. 5 columns. Tables.

COST OF STOPING ON THE RAND. P. C. M. & M. Soc. S. A., vol. 9, p. 225. Tables.

COST OF STOPING, SOUTH AFRICA. E. & M. J., vol. 75, p. 597.

COST OF STOPING IN THE WHITE BEAR MINE. J. C. M. I., vol. 11, p. 535. Table.

COST OF STOPING IN VEINS OF VARIOUS WIDTHS. Min. & Sci. Press, vol. 85, p. 322.

COST OF STOPING IN WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., pp. 199, 204, 205, 206, 207, 208. Tables.

COST OF STOPING IN WESTERN AUSTRALIAN MINES. Gold Min. & Mill. W. Aus., p. 507.

COST OF STOPING AT THE GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., p. 616. Table.

COST OF STOPING AT GALENA, KANSAS. Univ. Geol. Sur. of Kansas, vol. 8, p. 343. 1 page.

COST OF DRIFTING AND STOPING BY HAND AND MACHINES IN COPPER MINES. Min. & Sci. Press, vol. 48, p. 304. $\frac{1}{2}$ column.

See also **COST OF TUNNELING.**

COST OF STOPING IN TIN MINES, MALAY PENINSULA. Tin Deposits of the World, p. 58.

COST OF STOPING AT THE ESPERANZA MINE, MEXICO. Min. & Sci. Press, vol. 99, p. 846. 2 columns. Table.

COST COMPARISON BETWEEN STRIPPING NARROW REEFS AND STOPING THEM WITH WASTE. E. & M. J., vol. 76, p. 883. 1 column.

APPROXIMATE YIELD AND COST OF STOPING PER TON OF ORE BROKEN. Min. & Sci. Press, vol. 71, p. 302. Table.

COST OF STOPING IN THE TIN MINES, MALAY PENINSULA. T. I. M. & M., vol. 7, pp. 13 and 14.

See also **METHODS OF STOPING IN MINES.**

Cost of Stripping

COST OF STEAM SHOVEL MINING. E. & M. J., vol. 84, p. 439. 1 column.

COST OF STRIPPING CLINTON IRON ORE IN NEW YORK. E. & M. J., vol. 86, p. 1152. $\frac{1}{2}$ column.

COST OF MINING AND STRIPPING IRON ORE. E. & M. J., vol. 85, p. 115. $\frac{1}{2}$ column.

COST OF STRIPPING IRON ORE WITH STEAM SHOVEL. T. L. S. M. I., vol. 10, p. 153. Tables.

COST OF STRIPPING ANTHRACITE COAL. The Anthracite Coal Industry, Roberts, p. 21. 1 page.

COST OF STRIPPING TOP DIRT BY STEAM SHOVEL AT OROVILLE, CALIFORNIA, IN AURIFEROUS GRAVEL DREDGING. E. & M. J., vol. 81, p. 220.

See also **OPEN CUT MINING, ETC.**

Cost of Supplies

COST OF MINE SUPPLIES: Timber, Coal, Etc. Min. & Sci. Press, vol. 52, p. 256. $\frac{1}{2}$ column.

COST OF SUPPLIES AT GOLDFIELD, NEVADA. E. & M. J., vol. 82, p. 342.

COST OF SUPPLIES AT TONOPAH, NEVADA. E. & M. J., vol. 82, p. 107.

MINING SUPPLIES AT MELBOURNE, AUSTRALIA. T. I. M. & M., vol. 7, p. 111. 2 $\frac{1}{2}$ pages.

COST OF MINING AND MILLING SUPPLIES IN RHODESIA. Min. Mag., vol. 13, p. 7. Table.

See also **COST OF MINE AND MILL CONSTRUCTION.**

Cost of Support

COST OF TIMBER AND TIMBERING. M. & M., vol. 25, p. 458. Table.

COST OF MINE TIMBERING. Min. & Sci. Press, vol. 86, p. 241. 1 column.

COST OF MINE TIMBERING. Min. & Sci. Press, vol. 88, p. 127. Tables.

- ESTIMATION OF COST IN CONNECTION WITH TIMBERING. T. A. I. M. E., vol. 7, p. 84. 10 pages.
- COST OF TIMBERING IN THE SOFT HEMATITE ORES OF FURNESS, ENGLAND. T. F. I. M. E., vol. 8, p. 49.
- RELATIVE COST OF MAINTAINING THE TIMBER IN ANTHRACITE MINES, PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p. 29.
- COST OF TIMBERING AT GALENA, KANSAS: Shaft Cribbing; Drift Timbering; and Placing Cogs. Univ. Geol. Sur. of Kansas, vol. 8, p. 344. 2 pages.
- COST OF TIMBER IN MEXICO. T. A. I. M. E., vol. 35, p. 24.
- COST OF MINE TIMBER ON THE RAND—1902. Witwatersrand Goldfields, p. 458. Table.
- COST OF TIMBERING AT LAKE VIEW CONSOLS AND GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., pp. 182 and 214. Tables.
- COST OF TIMBERING IN WESTERN AUSTRALIAN GOLD MINES. Gold Min. & Mill. W. Aus., pp. 178, 214. $\frac{1}{2}$ page.
- COST OF DRAWING CHOCKS IN LONGWALL. Coll. Working and Management, p. 94.
- COST OF PILLARING IN LONGWALL. Coll. Working and Management, p. 94.
- COST OF SETTING TIMBER BALKS. Coll. Working and Management, p. 94.
- COST OF PIGSTY SUPPORT IN MINES. P. C. M. & M. Soc. S. A., vol. 7, p. 367. $\frac{1}{2}$ column.
- SLOPES: Costs of Stilled and Filled. E. & M. J., vol. 84, p. 1005. Table.
- THE COST OF TIMBER IN MINING. E. & M. J., vol. 46, p. 189. $\frac{1}{2}$ column.
- MINE COSTS AND THE TIMBER SUPPLY. Min. & Sci. Press, vol. 96, p. 504. $1\frac{1}{2}$ columns.
- COST OF TIMBER IN SOUTH AFRICA. Min. & Sci. Press, vol. 94, p. 339. Table.
- COST OF TIMBER DELIVERED AND PILED AT THE EMPIRE MINE, CALIFORNIA IN 1884. Min. & Sci. Press, vol. 49, p. 198.
- COST OF LUMBER AND TIMBER AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Feb., 1906, p. 1327. Table.
- COST OF TIMBER ON THE COMSTOCK. Min. & Sci. Press, vol. 48, p. 258.
- COST OF TIMBER AT TONOPAH. Min. & Sci. Press, vol. 86, p. 20.
- COST OF TIMBER AT TONOPAH, NEVADA. E. & M. J., vol. 82, p. 108.
- PRICE OF ROUND TIMBER AND LAGGING IN THE WEST. Min. & Sci. Press, vol. 92, p. 82.
- PRICE OF TIMBER, VENEZUELA. T. I. M. & M., vol. 9, p. 108. Table.
- COST OF TIMBER AT THE EL CALLAO MILL, VENEZUELA. T. I. M. & M., vol. 9, p. 108.
- See also METHODS OF TIMBERING.
- COST OF TIMBERING A SHAFT: Considerations. Min. & Sci. Press, vol. 87, p. 147.
- COST OF SHAFT LINING AT THE PIONEER MINE, ELY, MINNESOTA. J. C. M. I., vol. 7, p. 361. Table.
- COST OF CRIB-SET FOR DEEP SHAFT. T. I. M. & M., vol. 13, p. 515. Table.
- COST OF TIMBERING AT ASHLAND SHAFT, MICHIGAN. T. L. S. M. I., vol. 9, p. 37. Table.
- COST OF TIMBERING SHAFT, SUTTER CREEK, CALIFORNIA. Min. & Sci. Press, vol. 84, p. 35. Table.
- COST OF LINING MINE SHAFTS WITH STEEL. T. L. S. M. I., vol. 8, pp. 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56.
- COST OF SINKING, RAISING AND TIMBERING SHAFTS, WINZES and RAISES AT ASHLAND MINE, MICHIGAN. T. L. S. M. I., vol. 9, p. 37. Tables.

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- COST OF TIMBERING SHAFT No. 2, TAMARACK.** T. L. S. M. I., vol. 7, p. 54.
- COST OF CONCRETE SHAFT LINING.** Min. & Sci. Press, vol. 89, p. 340. Table.
- COST OF CONCRETE (ELLIPTICAL) SHAFT LINING AT BRIDGEPORT, PENNSYLVANIA.** M. & M., vol. 27, p. 110. Table.
- COST OF MAKING WATERTIGHT A SHAFT LINING WITH CEMENT.** T. I. M. E., vol. 30, p. 653. Table.
- COST OF CEMENT IN SHAFTING COMPARED WITH BRICK AND IRON.** T. F. I. M. E., vol. 4, p. 345.
- COST OF CONCRETE SHAFT LINING.** E. & M. J., vol. 88, p. 600. $\frac{1}{2}$ column.
- COST OF LINING VARIOUS FORMS OF SHAFTS WITH CONCRETE.** M. & M., vol. 30, p. 632. Tables.
- COST OF CONCRETE LINED SHAFT AT BRIER HILL, MICHIGAN.** E. & M. J., vol. 89, p. 971. $\frac{1}{2}$ column.
- COST OF REINFORCED CONCRETE LINING FOR GALLERIES: FRANCE.** Concrete and Constructional Engineering, London, vol. 2, p. 332. Table.
- COST OF MAKING ARTIFICIAL ROOF OF CONCRETE FOR THICK COAL SEAMS.** T. I. M. E., vol. 31, p. 26. 2 pages.
- See also **USE OF CONCRETE IN MINES.**
- COST OF SHAFT TUBBING.** P. C. M., vol. 2, p. 162. Table.
- See also **SHAFT LINING, ETC.**
- COST PER TONNAGE OF SQUARE SET TIMBERING.** J. C. M. I., vol. 6, p. 136.
- COST OF DOUBLE SET OR DOUBLE TIMBERING PER SET.** Rept. Inspr. Mines, Pa., 1878, p. 232.
- NUMBER OF SQUARE SETS PUT UP IN ONE DAY, WITH LABOR COST.** Min. & Sci. Press, vol. 85, p. 369.
- See also **SQUARE SET TIMBERING.**
- COST DATA PER SQUARE SET ROOSLAND, BRITISH COLUMBIA.** Min. & Sci. Press, vol. 85, p. 159. Tables.
- COST OF TIMBERING PER TON OF COAL RAISED.** T. I. M. E., vol. 16, p. 239. Table.
- COST OF TIMBER PER TON OF COAL MINED, IN THE ANTHRACITE MINES OF PENNSYLVANIA.** M. & M., vol. 27, p. 148.
- PRICE OF MINE TIMBER AT OREGON MINES.** M. & M., vol. 19, p. 15.
- COST OF FRAMED TIMBER TREESTLES.** R. R. Construction, Webb, p. 169. $\frac{1}{2}$ page.
- COMPARATIVE COSTS OF WOOD AND STEEL FOR MINE PROPS.** M. & M., vol. 27, p. 420.
- RELATIVE COST OF TIMBER AND STEEL PROPS.** E. & M. J., vol. 64, p. 309.
- COST OF STEEL SHAFT LINING.** T. L. S. M. I., vol. 10, p. 164. Table.
- See also **COST OF SHAFT SINKING.**
- COST OF MASONRY SUPPORT IN ALMADEN MINES.** Min. & Sci. Press, vol. 37, p. 342. Tables.
- COST OF MASONRY ARCHES FOR SUPPORT OF HANGING WALLS IN TILLY FOSTER IRON MINES.** Sch. Mines Quart., vol. 6, p. 316.
- COST OF UNDERGROUND MASONRY WORK.** Coll. Working and Management, p. 94. Table.
- COST OF PACKWALLING IN ENGLISH COAL MINES — LONGWALL.** Coll. Working and Management, p. 220. Table.
- COST OF TIMBERING IN PANEL AND LONGWALL.** Coll. Working and Management, pp. 244-245. Tables.
- COST OF MASONRY RETAINING WALL.** J. W. Soc. E., vol. 3, pp. 1319, 1320, 1327, 1328, 1331.
- COST OF DODSON CULM PLANT AND OTHERS.** M. & M., vol. 18, p. 389. Table.
- COST OF WATER PACKING OF EXCAVATIONS AT A COLLIERY IN SILESIA.** E. & M. J., vol. 78, p. 580.
- COST OF FILLING COAL SEAMS WITH CONVEYORS.** T. I. M. E., vol. 29, p. 460. Table.

COST OF FILLING A COAL SEAM. T. I. M. & M., vol. 15, p. 380. 3 pages.

COST OF STOWING PER CUBIC YARD FOR 1890, AT COBEZAS DEL PASTO, SPAIN. T. A. I. M. E., vol. 21, p. 100.

COST OF CULM FLUSHING. M. & M., vol. 18, pp. 390, 391.

COST OF HYDRAULIC STOWING IN WESTPHALIA, GERMANY. T. I. M. E., vol. 37, p. 269. 2½ pages. Tables.

See also **PACKING MINE WORKINGS, ETC.**

COST OF WORKING BY GOBBING-UP, USING WASTE OF MINE, AND OBTAINING OTHER WASTE FROM THE SURFACE. T. A. I. M. E., vol. 2, p. 111.

See also **KINDS OF SUPPORT.**

Cost of Surveying

COST OF MINERAL SURVEYS IN ARIZONA. Min. & Sci. Press, vol. 85, p. 132. 1 column.

COST OF MINERAL SURVEYS, ETC. Min. & Sci. Press, vol. 88, p. 333. ¼ column.

NEW SURVEY RATES. Min. & Sci. Press, vol. 85, p. 2. ¼ column.

COST OF PATENTING MINING CLAIMS. Min. & Sci. Press, vol. 95, p. 612. ¼ column. Table.

COST OF SECURING PATENT TO MINING CLAIM. Min. & Sci. Press, vol. 83, pp. 97 and 191.

COST OF MINE PATENTS. By F. W. Wagenen. Min. & Sci. Press, vol. 84, p. 6. 4 columns.

COST OF A MEXICAN PERTENENCIA. Min. & Sci. Press, vol. 85, p. 32.

See also **CLAIMS, TAXES, ETC.**

TABLE OF FEES FOR MINERS' CERTIFICATES, ETC., IN CANADA. Rept. Zinc Comm., Canada, pp. 371 and 375. Table.

COST OF LICENCES ON THE RAND: Prospectors' and Diggers' Licences. T. N. S. I. M. & M. E., vol. 10, p. 143.

SURVEYS AND ENGINEERING EXPENSES. R. R. Construction, Webb, p. 394.

COST OF A COLLIERY SURVEY. M. & M., vol. 30, p. 96. ½ column. Table. p. 159. 3¼ columns.

See also **UNDERGROUND SURVEYS.**

COST OF MAKING A COLLIERY MAP. M. & M., vol. 30, p. 159. Table.

COST OF GEOLOGICAL (EUROPEAN) SURVEYS. By E. A. Schneider. E. & M. J., vol. 62, p. 342, 2 columns; p. 366, 2 columns; p. 392, 1 column.

See also **SURVEYING.**

Cost of Tramming

COST OF SHOVELING AND TRAMMING. P. C. M. & M. Soc. S. A., vol. 7, p. 8. 2 columns.

COST: Comparison of the Tramming, and the Cost of Tramming with Electric Motors, at New Stassfurt, Zaukeroda, and Hohenzollern. T. A. I. M. E., vol. 20, p. 365.

COST OF TRAMMING IN MINE: In Transvaal. Min. Mag., vol. 12, p. 278. Table.

COST OF TRAMMING ON THE RAND. E. & M. J., vol. 81, p. 851. Table.

COST OF TRAMMING ON THE RAND. Witwatersrand Goldfields, p. 298. Table.

COST OF TRAMMING ORE, WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., pp. 161, 616. Tables.

COST OF TRAMMING AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, p. 1327. Table.

COST OF TRAMMING ("PUTTING") IN ENGLISH COAL MINES. Coll. Working and Management, p. 82. Tables.

See also **CABLEWAYS, ETC., and TRAMMING AND MUCKING.**

Cost of Operating Tramways

COST OF TRAMWAY. E. & M. J., vol. 76, pp. 269, 308.

COST OF TRANSPORTING ORE BY ROPEWAY. Min. & Sci. Press, vol. 72, p. 141.

COST OF ROPE TRAMWAYS PER RUNNING FOOT. E. & M. J., vol. 76, p. 513.

COST OF OPERATING TRAMWAYS. E. & M. J., vol. 76, p. 515.

APPROXIMATE PRICE LIST OF WIRE-ROPE TRAMWAYS ON THE ENDLESS ROPE SYSTEM. Aerial or Wire-Rope Tramways, p. 194. Table.

ESTIMATING COST OF TRAMWAYS. Aerial or Wire-Rope Tramways, pp. 108, 113, 148, 167, and 196. Tables.

COST OF TRANSPORTATION BY ROPE-WAY AT THE PIERREFITTE MINES, FRANCE. T. A. I. M. E., vol. 39, p. 390. $\frac{1}{2}$ page.

COST OF MINING AND CONVEYANCE OF ORE. By Bleichert Rope System at Somorostro, Mexico. Min. & Sci. Press, vol. 39, p. 215. Table.

COST OF TRANSPORTING ORE ON THE BLEICHERT TRAMWAY AT THE SMUGGLER-UNION MINE, TELLURIDE, COLORADO. T. A. I. M. E., vol. 26, p. 458.

COST OF CONSTRUCTION OF A TRAMWAY, WHICH HAS 38 BUCKETS, WEIGHT 500 LBS. EACH, TOTAL CAPACITY 5000 TONS PER MONTH. T. A. I. M. E., vol. 26, p. 458.

COST OF OPERATING HALLIDIE WIRE-ROPE TRAMWAYS. Aerial or Wire-Rope Tramways, pp. 99, 100, 108, 113, 137. Table.

COST OF OPERATING THE BLEICHERT WIRE-ROPE TRAMWAY. Aerial or Wire-Rope Tramways. pp. 137, 147, 157, 163, 167, 171.

COST OF CONSTRUCTION AND EQUIPPING THREE MILES OF HALLIDIE'S CABLE RAILROAD, DOUBLE-TRACK. Min. & Sci. Press, vol. 43, p. 157. Tables.

HANDLING ORE AT THE CŒUR D'ALENE MINES BY TRAMWAYS. T. A. I. M. E., vol. 33, p. 270. $\frac{1}{2}$ page.

COST OF OPERATING CABLEWAY AT CHICAGO CANAL. The Mechanical Handling of Material, p. 217.

See also CABLEWAYS, ETC.

Cost of Transportation

COST OF NARROW-GAUGE RAILROAD CONSTRUCTION AND OPERATION. Min. & Sci. Press, vol. 92, p. 101. $\frac{1}{2}$ column.

COMPARATIVE COST OF NARROW-GAUGE RAILROADS. Min. & Sci. Press, vol. 21, p. 27. $\frac{1}{2}$ column.

COST OF CONSTRUCTION AND COMPARATIVE COST OF OPERATING NARROW GAUGE RAILROADS. Min. & Sci. Press, vol. 41, p. 6. 1 column.

COST OF A NARROW-GAUGE RAILROAD AT MOJADA, MEXICO. T. A. I. M. E., vol. 15, p. 568.

COST OF RAILROAD MAKING PER MILE FOR SEVERAL YEARS. T. F. I. M. E., vol. 8, p. 451.

COST OF CONSTRUCTING A RAILROAD OF GIVEN LENGTH, ETC. M. & M., Apr., 1902, p. 424.

COST OF CONSTRUCTION OF NARROW-GAUGE RAILROAD. Min. & Sci. Press, vol. 38, p. 194. Table.

THE COST OF A TRAIN-MILE. Min. & Sci. Press, vol. 78, p. 404. $\frac{1}{2}$ column.

COST OF STOPPING A TRAIN. Min. & Sci. Press, vol. 70, p. 264. $\frac{1}{2}$ column.

COST OF POWER FOR TROLLEY CARS. Min. & Sci. Press, vol. 75, p. 101. $\frac{1}{2}$ column.

COST OF OPERATING LOCOMOTIVES. Min. & Sci. Press, vol. 38, p. 351. $\frac{1}{2}$ column.

WHAT RAILROAD TRAINS CAN BE RUN FOR. Min. & Sci. Press, vol. 51, p. 263. $\frac{1}{2}$ column.

COST OF MOVING RAILROAD TRAINS. Min. & Sci. Press, vol. 51, p. 418. $1\frac{1}{2}$ columns.

COST OF MAINTENANCE, REPAIRS, MOTIVE POWER, AND TOTAL OPERATING EXPENSE OF ENGLISH AND AMERICAN RAILROADS. E. & M. J., vol. 42, p. 38, table; p. 218. Table.

ESTIMATING WORKING COST OF OPERATING A RAILROAD. E. & M. J., vol.

- 30, p. 410, 2½ columns; p. 380, 1 column; p. 128, 1½ columns.
- SPEED COST IN ATLANTIC STEAMERS.** E. & M. J., vol. 42, p. 205. ½ column.
- COST OF TRANSPORTATION.** Min. & Sci. Press, vol. 91, p. 53. ½ column.
- MOUNTAIN TRANSPORTATION COSTS.** Min. & Sci. Press, vol. 88, p. 309. 1½ columns.
- COST: Loss of Shipping Concentrates.** Min. & Sci. Press, vol. 93, p. 139.
- CHEAP OCEAN TRANSPORTATION: A Raft of Logs.** Min. & Sci. Press, vol. 71, p. 83. 5 columns.
- COST OF RAILROAD TRANSPORTATION.** R. R. Construction, Webb, p. 402. ½ page.
- COST OF TRANSPORTATION: by Ocean, River, Lakes, Canals, Railroads.** Min. & Sci. Press, vol. 30, p. 134. Table.
- COMPARISON OF COST OF SHIPPING AND REFINING BULLION AND MATTE.** T. A. I. M. E., vol. 16, p. 261.
- COMPARATIVE COST OF PASSENGER TRANSPORTATION BY STEAM, HORSE, CABLE, ELECTRICITY.** Min. & Sci. Press, vol. 65, p. 250. ¼ column.
- THE COMPARATIVE CONDITIONS AND COSTS OF TRANSPORT BY RAILROAD AND CANAL.** By J. S. Jeans. T. F. I. M. E., vol. 8, p. 432. 10 pages.
- COST OF TRANSPORT BY RAILROAD AND CANAL, ENGLAND.** T. N. S. I. M. & M. E., vol. 9, p. 344. Table.
- COST OF RAILROAD TRANSPORT PER TON PER MILE.** T. F. I. M. E., vol. 8, pp. 453, 454.
- COST OF HAULING ORE ON NARROW GAUGE RAILROAD IN SOUTHERN CALIFORNIA.** Min. & Sci. Press, vol. 87, p. 231.
- COST OF TRANSPORTATION IN THE KLONDIKE, 1907.** E. & M. J., vol. 83, p. 521. ¾ column.
- COST OF TRANSPORTATION OF IRON ORES OF LAKE-SUPERIOR DISTRICT.** T. F. I. M. E., vol. 13, p. 530. Table.
- COST OF TRANSPORT OF ORE IN RHODESIA.** Min. & Sci. Press, vol. 90, p. 106. Table.
- COST OF SHIPPING ZINC ORE TO EUROPE,** Rept. of Zinc Comm. Canada, p. 20. ½ page.
- TRANSPORTATION, COSTS AND LABOR IN CENTRAL PERU.** By J. C. Pickering. E. & M. J., vol. 85, p. 589. 8½ columns. I.
- FREIGHT AND TREATMENT CHARGES IN SILVER SMELTING IN MEXICO.** T. I. M. & M., vol. 8, p. 246.
- FREIGHT RATES ON ORES.** Min. & Sci. Press, vol. 63, p. 40. 1½ columns.
- RAILROAD RATES.** Min. & Sci. Press, vol. 98, p. 334. 1½ columns.
- LAKE FREIGHT RATES FOR 1907.** E. & M. J., vol. 83, p. 380.
- FREIGHT RATES: Chicago to Oregon.** Min. & Sci. Press, vol. 85, p. 186.
- FREIGHT RATES: San Francisco to Mexico.** Min. & Sci. Press, vol. 86, p. 67.
- FREIGHT RATES: Utah and Nevada.** Min. & Sci. Press, vol. 91, p. 15.
- STEAMER FREIGHTS TO WESTERN AUSTRALIA.** By A. G. Charlton. Gold Min. & Mill W. Aus., p. 450. 2 pages.
- FREIGHT RATES ON MACHINERY FROM DETROIT TO WESTERN POINTS.** Min. & Sci. Press, vol. 84, p. 140.
- FREIGHT RATES IN THE WEST.** Min. & Sci. Press, vol. 25, p. 40. ½ column.
- FREIGHT RATES ON THE BAY, SAN FRANCISCO.** Min. & Sci. Press, vol. 66, p. 363. 2 columns.
- RAILROAD RATES IN EUROPE AND AMERICA.** Min. & Sci. Press, vol. 75, p. 361. Table.
- COMPARATIVE COST OF FREIGHT AND PASSENGER TRAFFIC.** Min. & Sci. Press, vol. 37, p. 22. ½ column.
- RAILROAD RATES ON COAL.** E. & M. J., vol. 66, p. 402.

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- INDIANA COAL RATES. E. & M. J., vol. 80, p. 835. 1 column.
- RAILROAD TRANSPORTATION RATES IN THE ANTHRACITE COAL FIELDS. The Anthracite Coal Industry, Roberts, p. 74. 4 pages.
- COST OF FREIGHT ON COAL FROM JAFFA TO JERUSALEM. E. & M. J., vol. 78, p. 211.
- FREIGHT RATES ON COAL IN MISSOURI. E. & M. J., vol. 85, p. 270. $\frac{1}{2}$ column.
- ILLINOIS COAL FREIGHT-RATES. T. A. I. M. E., vol. 40, p. 72. Table.
- RAILROAD RATE FROM BUTTE TO ANACONDA. E. & M. J., vol. 81, p. 1247.
- RAILROAD RATES ON CRUDE OIL FROM TEXAS AND CALIFORNIA TO COPPER QUEEN MINE. E. & M. J., vol. 81, p. 1247.
- FREIGHT RATES ON THE RAND (1895). Gold Mines of the Rand, p. 245. Table.
- FREIGHT RATES IN WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., p. 444. 9 pages.
- FREIGHT RATES FROM BROKEN HILL. E. & M. J., vol. 81, p. 421. $\frac{1}{2}$ column.
- RAILROAD RATES ON CRIPPLE CREEK ORES. Min. & Sci. Press, vol. 95, p. 517. $\frac{1}{2}$ column.
- FREIGHT RATES IN THE MONTEZUMA DISTRICT, COLORADO. M. & M., vol. 28, p. 503. $\frac{1}{2}$ column.
- FREIGHT RATES ON GOLD ORES IN COLORADO. Min. & Sci. Press, vol. 100, p. 35. Table.
- FREIGHT RATES IN THE CRIPPLE CREEK DISTRICT. M. & M., vol. 28, pp. 479-480. Tables.
- FREIGHT RATES AT TONOPAH, NEVADA. E. & M. J., vol. 82, p. 107. Table.
- FREIGHT RATE FROM SODAVILLE TO TONOPAH PER TON (1901). Min. & Sci. Press, vol. 83, p. 192.
- FREIGHT RATES FROM BOISE TO ALL POINTS IN THE BASIN RANGE IN 1900. Min. & Sci. Press, vol. 81, p. 400.
- WAGON AND RAILROAD FREIGHT RATES AT TONOPAH. M. & Sci. Press, vol. 86, p. 20.
- TRANSPORTATION INTO GOLDFIELD. Min. & Sci. Press, vol. 90, p. 150.
- IRON-ORE FREIGHT RATES. E. & M. J., vol. 82, p. 597.
- VESSEL FREIGHT RATES ON IRON-ORES. T. A. I. M. E., vol. 16, p. 197.
- FREIGHT RATES FROM THE CŒUR D'ALENE DISTRICT. Min. & Sci. Press, vol. 101, p. 142. $1\frac{1}{2}$ columns.
- COST OF SHIPPING ZINC ORE TO EUROPE: Freight Rates. Min. Mag., vol. 12, p. 227. 2 columns.
- FREIGHT RATES ON ZINC ORE FROM SLOCAN TO FRANK. Rept. Zinc Com., Canada, p. 55. Table.
- See also TRANSPORTATION BY RAIL.
- NOTE ON THE COST OF IRON RAILS AS MADE IN 1866 IN A LEADING ENGLISH RAILROAD COMPANY'S ROLLING MILL. By P. Barnes. T. A. I. M. E., vol. 6, p. 524.
- COST OF REPAIRS AND RENEWALS OF PALE BRIDGES. E. & M. J., vol. 50, p. 313. $\frac{1}{2}$ column.
- COST OF SNOW SHEDS AND TOE CRIBBING, CANADIAN PACIFIC RAILROAD. E. & M. J., vol. 47, p. 212.
- COST OF CONSTRUCTING A REINFORCED CONCRETE ARCH. Eng.-Cont., vol. 27, p. 86. 3 columns.
- COST OF ECONOMIC CENTERS FOR A REINFORCED CONCRETE ARCH. Eng.-Cont., vol. 27, p. 30. 7 columns.
- COST OF MASONRY (BRIDGE), ESPECIALLY FOR RAILROAD WORK. R. R. Construction, Webb, p. 400. Table.
- COST OF LAYING MINE TRACK. E. & M. J., vol. 86, p. 135. $1\frac{1}{2}$ columns.
- COST OF MINE TRACK. M. & M., vol. 31, p. 727. Table.
- COST OF ELECTRICALLY WELDING RAIL-JOINTS. Eng.-Cont., vol. 27, pp. 126 and 127. $2\frac{1}{2}$ columns.
- COST OF RAILROAD RAILS. R. R. Construction, Webb, p. 248. $\frac{1}{2}$ page.

- COST OF RAILS PER MILE.** R. R. Construction, Webb, p. 397. Table.
- COST OF MAKING STEEL RAILS.** E. & M. J., vol. 38, p. 296.
- COST OF TRACK SCALES.** M. & M., vol. 25, p. 458. Table.
- COST OF TRACK LAYING.** M. & M., vol. 25, p. 458. Table.
- See also **MINE ROADS AND TRACKS.**
- COST OF REPAIRS TO MINE CARS.** E. & M. J., vol. 86, p. 135. 2 columns.
- See also **MINE CARS, ETC.**
- COST OF RAILROAD CARS.** Min. & Sci. Press, vol. 52, p. 327. $\frac{1}{2}$ column.
- BILLS OF MATERIAL AND COSTS PER RUNNING FOOT FOR BRIDGES AND VIADUCTS OF TIMBER.** T. F. I. M. E., vol. 8, pp. 131, 133, 137, 142.
- INCREASED COST OF MATERIALS FOR RAILROAD CONSTRUCTION.** Eng.-Cont., vol. 27, p. 39. $1\frac{1}{2}$ columns.
- COST OF SUBMARINE CABLES.** Min. & Sci. Press, vol. 92, p. 157.
- COST OF LAND AND LAND DAMAGES IN ENGINEERING WORK, ESPECIALLY RAILROAD CONSTRUCTION.** R. R. Construction, Webb, p. 394.
- COST OF ELECTRICAL CANAL HAULAGE.** Engineering, London, vol. 64, p. 252. $5\frac{1}{2}$ columns; p. 347, 3 columns; p. 402, 3 columns; p. 428, 3 columns; and vol. 66, p. 728. Tables.
- COST OF CANAL-HAULAGE BY ELECTRICITY, STEAM, AND HORSE-POWER.** T. F. I. M. E., vol. 8, pp. 440, 456, 478, and 480.
- COST OF TRANSPORTATION ON THE ERIE CANAL.** E. & M. J., vol. 25, p. 239. $\frac{1}{2}$ column.
- COST OF TRANSPORTATION OF ANTHRACITE COAL BY CANAL.** The Anthracite Coal Industry, Roberts, p. 64, 1 page.
- COST OF CHICAGO DRAINAGE CANAL, COMPARED WITH OTHER WORKS OF ITS CLASS.** Engineering, London, vol. 63, p. 1. Table.
- See also **CANAL TRANSPORTATION.**
- COST OF WAGON ROAD CONSTRUCTION.** E. & M. J., vol. 78, p. 869.
- COST OF MATERIALS AND WAGES OF LABOR FOR PAVING WORK IN REPRESENTATIVE AMERICAN CITIES.** Eng.-Cont., vol. 27, p. 133. 10 columns.
- COST OF HAULAGE:** by Carts, Wagons, Wheelbarrows, and Scrapers. R. R. Construction, Webb, pp. 128, 139. 7 pages.
- COST OF TRANSPORTATION:** by Pack-trains, Wagons, and Locomotives. By C. F. Lummis. McClures' Magazine, vol. 26, No. 1, Nov., 1905, p. 85.
- FREIGHT AND TREATMENT CHARGES ON CRIPPLE CREEK ORE.** E. & M. J., vol. 78, p. 1022. Table.
- COST OF HAULING BY WAGON IN SAN JUAN MOUNTAINS, FOUR-HORSE TEAM.** E. & M. J., vol. 76, p. 82.
- COST OF WAGON HAULAGE IN THE MOUNTAINS OF THE WEST.** Min. & Sci. Press, vol. 92, p. 51.
- FORMER COSTS OF TRANSPORTING ANTHRACITE COAL BY WAGON.** The Anthracite Coal Industry, Roberts, p. 62.
- COST OF CARRYING (HAULAGE) IN WAGONS.** T. N. S. I. M. & M. E., vol. 10, p. 171.
- COST OF WAGON HAULAGE IN MONTANA.** Min. & Sci. Press, vol. 41, p. 98.
- COSTS AND PROFITS OF GOOD ROADS.** Min. & Sci. Press, vol. 67, p. 423. $1\frac{1}{2}$ columns.
- COST OF MAKING A CORDUROY ROAD.** Eng.-Cont., vol. 27, p. 59. $\frac{1}{2}$ column.
- METHODS AND COST OF REDUCING DUST AND HARDENING ROADS BY SURFACE APPLICATIONS.** By J. W. Howard. Eng.-Cont., vol. 27, p. 143. 9 columns.
- COST OF CUTTINGS AND EMBANKMENTS FOR MINING ROADS.** Engineering, London, vol. 70, p. 41. $1\frac{1}{2}$ columns.
- See also **WAGON ROADS, ETC.**

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COST OF AUTOMOBILE OPERATION. Machinery, vol. 12, June, 1906, p. 518. Table.

COST OF PORTAGE IN COLOMBIA. Min. & Sci. Press, vol. 99, p. 183. $\frac{1}{2}$ column. Table.

COST OF FLUME TRANSPORTATION OF ORE IN ALASKA. Min. & Sci. Press, vol. 71, p. 26.

See also **COST OF FLUME CONSTRUCTION AND PORTAGE, PACKING AND FLUMING.**

Cost of Tunneling

COST OF TUNNELING. R. R. Construction, Webb, p. 195. $\frac{1}{2}$ page. Table.

COST OF TUNNEL BUILDING. Min. & Sci. Press, vol. 83, p. 256. Tables.

TUNNEL EXPENSES. Min. & Sci. Press, vol. 91, p. 190. Table.

COST OF TUNNEL EXCAVATION AND TIME REQUIRED FOR WORK. Tunneling, Prelini, p. 300. $7\frac{1}{2}$ pages.

COST OF TUNNEL DRIVING. Min. & Sci. Press, vol. 94, p. 272.

TUNNEL DRIVING AT LOW COST. By W. H. Bunce. Min. & Sci. Press, vol. 97, p. 60. $1\frac{1}{2}$ columns.

COST OF TUNNEL DRIVING: A Record of Economy. Min. & Sci. Press, vol. 97, p. 60. $1\frac{1}{2}$ columns.

COSTS OF PAST AND PRESENT TUNNELING AND MILLING. Min. & Sci. Press, vol. 74, p. 235. $\frac{1}{2}$ column.

COST OF TUNNELING. Min. & Sci. Press, vol. 74, p. 411. $\frac{1}{2}$ column.

COST OF TUNNEL EXCAVATION PER FOOT. Tunneling, Prelini, p. 122.

ESTIMATED COST OF AMERICAN TUNNELS. Tunneling, Prelini, p. 122. Tables.

COST OF BOSTON SUBWAY PER FOOT. Tunneling, Prelini, pp. 192, 200.

COST OF TUNNELING THROUGH SANDSTONE, LIMESTONE AND SLATE. M. & M., vol. 18, p. 311.

COST OF CONSTRUCTING A TUNNEL THROUGH CLAY. Eng.-Cont., vol. 27, p. 51. $7\frac{1}{2}$ columns.

COST OF COMPRESSED AIR TUNNELING. Engineering, London, vol. 66, p. 634. Table.

LOW-COST TUNNELING WITH ELECTRIC DRILLS. E. & M. J., vol. 79, p. 758. $\frac{1}{2}$ column.

COST OF TUNNELING WITH A TEMPLE-INGERSOLL ELECTRIC-AIR DRILL. M. & M., vol. 27, p. 53.

COST AND RATE OF WORKING OF THE STANLEY HEADING-MACHINES. T. F. I. M. E., vol. 6, pp. 7 and 8.

COST OF TUNNEL DRIVING IN BURMA. T. I. M. & M., vol. 5, pp. 136, 170, 220.

COST OF TUNNELING IN CALIFORNIA. Miner's Pocket Book, Lock, p. 218. Table.

COST OF TUNNELING AT THE MELONES MINE, IN CALAVERAS COUNTY, CALIFORNIA. By W. C. Ralston. E. & M. J., vol. 66, p. 758. $1\frac{1}{2}$ columns.

COST OF TUNNELING IN LEHIGH REGION. Second Geol. Sur. Pa., A C, pp. 100, 102.

COST OF TUNNELING AT THE HOGSBACK MINE, PLACER COUNTY, CALIFORNIA. By W. C. Ralston. E. & M. J., vol. 48, p. 160. $1\frac{1}{2}$ columns.

COST OF TUNNELING IN CONNECTION WITH HYDRAULIC MINING IN CALIFORNIA. E. & M. J., vol. 11, p. 120. $\frac{1}{2}$ column.

COST OF BEDROCK TUNNELING, CALIFORNIA. Min. & Sci. Press, vol. 18, p. 376. $\frac{1}{2}$ column.

COST OF CALIFORNIA PLACER TUNNELS. Min. & Sci. Press, vol. 34, p. 103. $\frac{1}{2}$ column.

COST OF TUNNELING IN RHYOLITE: Iron Mountain, Shasta County, California. Min. & Sci. Press, vol. 94, p. 56. Table.

COST OF DRIVING THE LOS ANGELES TUNNEL. Min. & Sci. Press, vol. 100, p. 681. 3 columns. Tables.

- COST OF LOS ANGELES AQUEDUCT. M. & M., vol. 31, p. 138. 6 columns. Tables.
- COST OF TUNNEL DRIVING IN COLORADO. Min. & Sci. Press, vol. 99, pp. 744, 745, 746 and 747. Tables.
- LENGTHS AND COSTS OF CRIPPLE CREEK TUNNELS. Min. & Sci. Press, vol. 83, p. 201.
- COST OF VARIOUS TUNNELS. Min. & Sci. Press, vol. 83, p. 213.
- COST DATA OF THE GUNNISON TUNNEL. By L. Duncan. E. & M. J., vol. 80, p. 59. $1\frac{1}{2}$ columns.
- COST OF DRIVING TUNNEL FOR HYDRAULIC MINING IN COLORADO. Min. & Sci. Press, vol. 93, p. 688. Table.
- COST OF DRIVING THE NEWHOUSE TUNNEL. M. & M., vol. 27, p. 37. Table.
- DETAILED COST OF DRIVING THE NEWHOUSE TUNNEL PER FOOT. E. & M. J., vol. 73, p. 553. Table.
- COST OF WORK IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 758. 1 column.
- COST OF DRIVING IRON MOUNTAIN TUNNEL. E. & M. J., vol. 85, p. 564. Table.
- COST OF TUNNELING, GEORGIA GOLD FIELDS. E. & M. J., vol. 61, p. 617.
- COST OF TUNNELING, DELAMAR, IDAHO. Min. & Sci. Press, vol. 80, p. 150. Table.
- COST OF TUNNELING ON THE MOTHER LODE. Min. & Sci. Press, vol. 77, p. 446. Tables.
- THE BI-METALLIC TUNNEL, GRANITE MOUNTAIN, MONTANA. M. & M., vol. 17, p. 130. $\frac{1}{2}$ column.
- COST OF TUNNELING IN THE ANTHRACITE FIELDS. E. & M. J., vol. 84, p. 503. $\frac{1}{2}$ column.
- COST OF THE LOCUST MOUNTAIN TUNNEL, ASHLAND, PENNSYLVANIA. Coll. Engr., vol. 11, p. 11. $\frac{1}{2}$ column.
- COST OF DRIVING TUNNELS IN PENNSYLVANIA COAL MINES. Rept. Insp. Mines, Pa., 1878, p. 248. Table.
- PROBABLE COST, COMPLETE, OF DRIVING A $7\frac{1}{2}' \times 9'$ TUNNEL IN THE SOUTHERN COAL FIELD. M. & M., vol. 20, p. 139.
- See also EXAMPLES OF TUNNELS.
- COST OF DRIVING SLOPES IN THE ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 22.
- COST OF SINKING "STAPLES" (INCLINES) IN ENGLISH COAL MINES. Coll. Working and Management, p. 93. $\frac{1}{2}$ page.
- COST OF THE LOCUST MOUNTAIN TUNNEL, ASHLAND, PENNSYLVANIA. E. & M. J., vol. 50, p. 101. $\frac{1}{2}$ column.
- COST OF CONSTRUCTING A LARGE CONCRETE SEWER, ST. LOUIS, MISSOURI. Eng.-Cont., vol. 27, p. 61. 4 columns. I.
- COST OF ENTRY DRIVING. M. & M., vol. 25, p. 458. Table.
- COST OF DRIVING ENTRY. M. & M., vol. 20, p. 428.
- COST OF DRIVING ENTRIES AND ROOMS. E. & M. J., vol. 75, p. 331.
- COST OF DOUBLE ENTRIES PER FOOT. E. & M. J., vol. 75, p. 332.
- APPROXIMATE COST OF ENTRY: Driving by Machine and Hand in Colorado. Coll. Engr., vol. 11, p. 223. Table.
- COST OF DRIVING ENTRIES AND ROOMS. E. & M. J., vol. 85, p. 896. $1\frac{1}{2}$ columns.
- See also ROOMS AND ENTRIES.
- COST OF DRIVING GANGWAYS IN PENNSYLVANIA COAL MINES WITH DIMENSIONS. Rept. Insp. Mines, Pa., 1879, pp. 322 and 323. Table.
- COST OF DRIVING GANGWAYS AND AIRWAYS IN THE PENNSYLVANIA ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 26. Tables.

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- COST OF DRIVING MINE OPENINGS IN ENGLISH COAL MINES. Coll. Working and Management, pp. 172, 244 and 245. Tables.
- COST OF DRIVING A STONE-DRIFT IN ENGLAND. T. I. M. E., vol. 18, p. 122.
- COST OF DRIVING STONE DRIFTS, ENGLAND. P. C. M., vol. 2, p. 253. Table.
- COST OF STONE-DRIFTS IN ENGLISH COAL MINES. Coll. Working and Management, pp. 90 and 92. Tables.
- COST OF ROCK WORK IN COAL SEAMS. E. & M. J., vol. 74, p. 407. Table.
- COST OF DRIVING AND CROSS-CUTTING AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 436. Table.
- COST OF CROSS-CUTS AND STATION. M. & M., vol. 31, p. 729. Table.
- COST OF DRIVING CROSS-CUTS. M. & M., vol. 31, pp. 695-697. Tables.
- COST OF WORKING IN MINES: Especially Drifting. Min. & Sci. Press, vol. 33, p. 292. $\frac{1}{2}$ column.
- METHOD OF CALCULATING COST OF MAKING A SLANTING CUT CONNECTING TWO FAULTED PORTIONS OF A COAL SEAM. Coll. Working and Management, pp. 85 and 91. Table.
- COST OF DRIFTING BY AIR DRILLS. Min. & Sci. Press, vol. 82, p. 179. $\frac{1}{2}$ column.
- COST OF DRIFTING. M. & M., vol. 31, p. 730. Table.
- COST OF DRIFTING, SOUTH AFRICA. E. & M. J., vol. 75, p. 597.
- COST OF DRIFTING ON THE RAND. Gold Mines of the Rand, p. 259. $\frac{1}{2}$ page.
- MINING COSTS ON THE YUKON: Drifting. E. & M. J., vol. 75, p. 892. Table.
- COST OF DRIFTING AND SHAFT-SINKING AT TONOPAH. E. & M. J., vol. 82, p. 108.
- COST OF DRIFTING AND STOPING IN THE LAKE SUPERIOR COPPER MINES. E. & M. J., vol. 82, p. 645. 6 columns.
- COST OF DRIFT TUNNELING, RED POINT, CALIFORNIA. Min. & Sci. Press, vol. 68, p. 151. Table.
- COST OF DRIFTING IN THE CRIPPLE CREEK DISTRICT. M. & M., vol. 30, p. 10. Tables.
- COST OF DRIFTING WITH A WATER LEYNER DRILL, NEWHOUSE TUNNEL, IDAHO SPRINGS, COLORADO. M. & M., vol. 27, pp. 73 and 74. Table.
- COST OF DRIFTING IN OREGON MINES. M. & M., vol. 19, p. 15.
- COST OF DRIFTING BY NATIVE LABOR IN CENTRAL AMERICA. Min. & Sci. Press, vol. 89, p. 338. Table.
- COST OF DRIFTING AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol. 8, p. 341. $1\frac{1}{2}$ pages.
- COST OF DRIFTING, HOMESTAKE MINE. Min. & Sci. Press, vol. 88, pp. 128 and 147. Tables.
- COST OF DRIFTING IN THE SAHUAYACAN MINE, MEXICO. E. & M. J., vol. 80, p. 1214. Table.
- COST OF DRIFTING IN THE WHITE BEAR MINE. J. C. M. I., vol. 11, p. 534. 1 page. Tables.
- COST PER FOOT OF DRIVING DRIFTS, WINZES, SHAFTS, ETC., PARK CITY, UTAH. Min. & Sci. Press, vol. 91, p. 334. Table.
- COST OF RUNNING A DRIFT IN SUMATRA. P. C. M. & M. Soc. S. A., vol. 10, p. 317. Table.
- COST OF DRIVING IN THE TIN MINES OF THE MALAY PENINSULA. T. I. M. & M., vol. 7, p. 14.
- COST OF DRIVING AND CROSS-CUTTING, NEW SOUTH WALES. T. I. M. & M., vol. 7, p. 151.
- COST OF DRIFTING IN THE TIN MINES OF THE MALAY PENINSULA. Tin Deposits of the World, p. 58.
- COST OF DRIVING DEEP LEVELS IN NOVA SCOTIA. J. M. Soc. N. S. vol. 9, p. 96. Table.
- COST OF RUNNING LEVELS AND CROSS-CUTS, LINCOLN MINE, CALIFORNIA.

- Min. & Sci. Press, vol. 86, p. 25. Table.
- COSTS OF DRIVES AND LEVELS IN WESTERN AUSTRALIA MINES.** Gold Min. & Mill., W. Aus., pp. 174 and 214. 2 pages.
- COST OF DRIVING AT GOLDEN HORSESHOE, WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., p. 616. Table.
- COST OF DRIVING LEVEL ON THE RAND.** T. N. S. I. M. & M. E., vol. 10, p. 136.
- See also **METHODS OF TUNNELING, AND EXAMPLES OF TUNNELS.**
- COST OF DRIVING A RAISE.** E. & M. J., vol. 89, p. 1326. Table.
- COST OF DRIVING RAISES.** M. & M., vol. 31, p. 731. Table.
- COST OF DRIVING WINZES AND RISES.** Miner's Pocket Book, Lock, pp. 221, 222. Table.
- Cost of Ventilation**
- COST OF VENTILATION BY DIFFERENT SYSTEMS.** Miner's Pocket Book, Lock, pp. 338, 340. $\frac{1}{2}$ page
- COST OF VENTILATING EQUIPMENT.** M. & M., vol. 25, p. 458. Table.
- See also **MECHANICAL VENTILATORS, FANS, ETC.**
- COST OF VENTILATION IN THE COMSTOCK MINES, NEVADA.** T. A. I. M. E., vol. 41, p. 42. 1 page.
- COST OF VENTILATING DRIFT MINES.** Min. & Sci. Press, vol. 68, p. 165. Table.
- COST OF VENTILATION PER TON OF COAL MINED: Anthracite Fields.** Coal Mining Supplement, E. & M. J., vol. 88, p. 24. $\frac{1}{2}$ column.
- COST OF MAKING AN AIR CROSSING.** Coll. Working and Management, pp. 86, 146 and 147. $\frac{1}{2}$ page. Tables.
- COST OF CONCRETE OVERCASTS.** E. & M. J., vol. 84, p. 451. $\frac{1}{2}$ column.
- COST OF CONSTRUCTING AN AIR-TIGHT BRATTICE IN A COAL MINE, ENGLAND.** Coll. Working and Management, p. 142. Table.
- See also **STOPING, DOORS AND REGULATORS IN MINES.**
- COMPARISON OF COST OF POWER IN EXHAUST AND PLENUM VENTILATION OF MINES AND DWELLINGS.** By W. P. Trowbridge. Sch. Mines Quart., vol. 6, p. 82. $1\frac{1}{2}$ pages.
- COST OF AIR (VENTILATION) TUBES.** Coll. Working and Management, p. 143. $\frac{1}{2}$ page. Table.
- FIRST COST OF MECHANICAL VS. CHIMNEY DRAFT.** E. & M. J., vol. 83, p. 280. 1 column.
- COST OF SPRAYING OPERATIONS.** E. & M. J., vol. 87, p. 195. 2 columns.
- COST OF EQUIPPING COAL MINES FOR SPRAYING.** M. & M., vol. 29, p. 103. $\frac{1}{2}$ column.
- COST OF WATERING COAL-DUST IN GERMANY.** T. F. I. M. E., vol. 9, p. 94.
- See also **METHODS OF VENTILATING MINES.**
- Cost of Washing Coal and Ores**
- COST OF COAL-WASHING WITH THE LÜHRIG SYSTEM.** T. F. I. M. E., vol. 7, p. 399.
- COST OF JIG-WASHING OF COAL.** E. & M. J., vol. 84, p. 20. Table.
- COST OF (COAL) WASHING PER TON: On Basis of Daily Output of 300 Tons.** Sch. Mines Quart., vol. 17, p. 399. Table.
- COST OF COAL-WASHING BY MURTON WASHER.** T. F. I. M. E., vol. 9, p. 44.
- COST OF WASHING COAL, ALABAMA.** T. A. I. M. E., vol. 25, p. 127.
- COST OF CLEANING BITUMINOUS COAL.** E. & M. J., vol. 77, p. 558.
- COST OF WASHING COAL AT NORTH MOTHERWELL COLLIERY.** T. F. I. M. E., vol. 6, p. 395.
- COST OF WASHING ANTHRACITE FINE COAL.** The Anthracite Coal Industry, Roberts, p. 225. 2 pages.

**COST OF ANTHRACITE COAL WASH-
ERIES, PENNSYLVANIA.** The An-
thracite Coal Industry, Roberts,
p. 224. 1 page.

See also **WASHING COAL AND MINERAL.**

Cost of Water

**COST OF WATER FOR KIMBERLEY DIA-
MOND MINES.** E. & M. J., vol. 76,
p. 237.

**COST OF WATER FOR MILLING PUR-
POSES AND DOMESTIC USES AT THE
MERCUR MINES, UTAH (1897).** E.
& M. J., vol. 63, p. 428.

See also **WATER IN MILLING.**

**COST OF WATER AND HOMESTEAD FEES
AND COMMISSIONS, IN NEVADA.** Min.
& Sci. Press, vol. 91, p. 62. Table.

**COST OF WATER IN WESTERN AUS-
TRALIAN MINES.** Gold Min. & Mill.
W. Aus., pp. 131, 143, 144. Tables.

**RATE OF CHARGE FOR WATER, VICTORIA
MINING DISTRICTS.** Min. & Sci.
Press, vol. 21, p. 14.

**COST OF CONDENSING WATER, WEST-
ERN AUSTRALIA.** Gold Min. & Mill.
W. Aus., p. 132.

**COST AND RETURNS PER MINER'S INCH
IN GOLD GRAVEL WORKING.** Min.
& Sci. Press, vol. 85, pp. 324, 325.
Table.

**COST AND RETURNS PER MINING INCH
IN HANDLING LOW-GRADE GRAVEL.**
Min. & Sci. Press, vol. 86, p. 244.
Table.

**COST OF WATER IN THE CALIFORNIA
HYDRAULIC MINES.** E. & M. J.,
vol. 11, p. 120.

**COST AND PRESSURES OF WATER FOR
HYDRAULIC MINING.** Min. & Sci.
Press, vol. 65, p. 314. $\frac{1}{2}$ column.

See also **HYDRAULIC MINING, ETC., and
COST OF HYDRAULIC MINING.**

**COST OF WATER SOFTENING BY THE
ARCHBUTT-DEELEY PROCESS.** Engi-
neering, London, vol. 66, p. 232.
Table.

ECONOMY IN THE USE OF WATER. Min.
& Sci. Press, vol. 78, p. 432. $\frac{1}{2}$ col-
umn.

**ECONOMIZING WATER IN CONCENTRA-
TION.** Min. & Sci. Press, vol. 77,
p. 633. 1 column.

See also **SOURCE AND SUPPLIES OF
WATER.**

DAMS FOR MINING PURPOSES

Stresses in Dams, Their Stability and Other Data

MASONRY DAM FORMULAS. By O. L.
Brodie. Sch. Mines Quart., vol. 29,
p. 241. 33 pages. I.

**SOME RECENT CONSIDERATIONS OF
STRESSES IN HIGH MASONRY DAMS.**
By C. E. Morrison. Sch. Mines
Quart., vol. 31, p. 145. 27 pages. I.

STABILITY OF DAMS. By J. F. Jackson.
Min. & Sci. Press, vol. 100, p. 324.
4 $\frac{1}{2}$ columns. I.

**SOME OBSERVATIONS ON THE STABILITY
OF DAMS.** By J. F. Jackson. J. W.
Soc. E., vol. 14, p. 625. 16 pages. I.

Description of Dams and Their Construction

SLAG-DAMS. Min. & Sci. Press, vol. 95,
p. 553. 2 columns. I.

SLAG DAM. By F. M. Smith. Min.
& Sci. Press, vol. 95, p. 205. $\frac{1}{2}$ col-
umn.

NOTES ON THE BELUBULA DAM. By
O. Schulze. T. Au. I. M. E., vol. 4,
p. 160. 12 pages. I.

A COLORADO MOUNTAIN RESERVOIR.
By R. M. Hosea. J. W. Soc. E.,
vol. 12, p. 495. 19 $\frac{1}{2}$ pages. I.

**THE CHEW RESERVOIR OF THE ASH-
TON-UNDERLYNE, STALYBRIDGE, AND
DUKINFIELD DISTRICT WATER-
WORKS.** By A. L. Mellor. T. I.
M. E., vol. 38, p. 229. 4 pages. I.

**FAILURE OF THE YUBA RIVER DÉBRIS
BARRIER.** By H. H. Wadsworth.
Min. & Sci. Press, vol. 101, p. 630.
7 $\frac{1}{2}$ columns. I.

**TAILINGS DAM OF THE CANANEA CON-
SOLIDATED COPPER COMPANY.** By

- L. D. Ricketts. E. & M. J., vol. 89, p. 502. 2½ columns. I.
- HYDRAULIC FILLING OF DAM. By D. F. Campbell. Min. & Sci. Press, vol. 97, p. 30. 30¾ columns.
- See also DISPOSAL OF WASTE.
- REINFORCED CONCRETE RESERVOIR. By J. B. Henson. E. & M. J., vol. 90, p. 205. 2 columns. I.
- See also USE OF CONCRETE IN MINES.
- FIRE-PROOF DOORS. E. & M. J., vol. 87, p. 300. 1½ columns.
- See also MINE FIRES.
- FREEZING METHOD FOR RESTRAINING MINE WATERS. By E. H. Nuttor. Min. & Sci. Press, vol. 99, p. 617. ¼ column.
- See also SOURCE AND SUPPLIES OF WATER.
- See also COST OF DAMS, ETC.

Underground Dams

- UNDERGROUND DAMS. By A. S. Kenyon. T. Au. I. M. E., vol. 7, p. 113. 8 pages. I.
- DAMS IN THE WABANA MINES. J. C. M. I., vol. 13, p. 634. ¼ page.
- BRICKWORK DAMS IN THICK COAL. By L. Holland. T. I. M. E., vol. 37, p. 54. 5 pages. I.
- A CONCRETE BLOCK MINE DAM. M. & M., vol. 29, p. 47. ¼ column. I.
- See also USE OF CONCRETE IN MINES.
- GATE FOR CONTROLLING MINE WATER. E. & M. J., vol. 89, p. 452. ¼ column. I.
- See also INUNDATIONS IN MINES.
- WATER-TIGHT BULKHEAD DOOR. E. & M. J., vol. 87, p. 262. 1 column. I.
- CAST-IRON MINE BULKHEAD. E. & M. J., vol. 88, p. 991. 1½ columns. I.

MINING DISTRICTS

Miscellaneous Districts

- PRINCIPAL MINES IN AMERICA. Min. & Sci. Press, vol. 96, p. 161. Table. 2 columns.
- PARALYSIS OF MINING DISTRICTS. By E. B. Kirby. Min. & Sci. Press, vol. 99, p. 467. 7 columns.
- ASBESTOS: Occurrence and Uses. By H. R. Edgecomb. M. & M., vol. 31, p. 469. 6½ columns. I.
- BISMUTH: Its Occurrence and Use. By E. B. Wilson. M. & M., vol. 30, p. 105. 5½ columns.
- AMERICAN BORAX DEPOSITS. By C. R. Keyes. E. & M. J., vol. 88, p. 826. 5 columns. I.
- See also UNITED STATES.
- OUR STEAM-COAL AND ITS USES. By L. Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.
- CUMBERLAND COAL. Min. Mag., vol. 1, p. 35. 9 pages.
- SEMI-BITUMINOUS COAL-FIELDS OF GREAT BRITAIN AND AMERICA COMPARED. By Professor Whitaker. Min. Mag., vol. 10, p. 189. 2 pages.
- AMERICAN vs. EUROPEAN COAL MINES. By H. M. Payne. M. & M., vol. 31, p. 195. 2½ columns.
- BRIEF NOTES ON EUROPEAN COAL MINES. By F. W. Parsons. E. & M. J., vol. 88, p. 497, 7½ columns, I.; p. 589, 12 columns, I.; p. 809, 11 columns, I.
- KAOLINS AND FIRE CLAYS OF EUROPE. By H. Rice. U. S. G. S., 19th Ann. Rept., pt. 6, 91 pages, 1897-98.
- COPPER PROSPECTS. By T. L. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 305, 9 columns, I.; vol. 6, p. 80, ¼ column; p. 111, 1½ columns.
- DIAMOND-CARBON IN METEORITES. Min. & Sci. Press, vol. 95, p. 310. ¼ column.
- CARBONS: The Black Diamond. By J. Baszanger. Min. & Sci. Press, vol. 95, p. 788. ¼ column.
- RARE EARTHS: Their Occurrence and Use. By C. Bogenrieder. T. Au. I. M. E., vol. 13, p. 87. 28 pages.
- THE RARE METALS: Beryllium. By C. Baskerville. E. & M. J., vol. 86, p. 907. 2½ columns.

- BOBON: Its Occurrence and Uses.** By E. B. Wilson. M. & M., vol. 30, p. 168. 4½ columns.
- THE RARE METALS: Columbium.** By C. Baskerville. E. & M. J., vol. 86, p. 960. 2½ columns.
- LITHIUM AND ITS SOURCES.** By F. L. Hess. Min. & Sci. Press, vol. 100, p. 822. 5 columns.
- THE RARE METALS: Molybdenum.** By C. Baskerville. E. & M. J., vol. 86, p. 1055. 2½ columns.
- THE RARE METALS: Tantalum.** By C. Baskerville. E. & M. J., vol. 86, p. 1100. 2½ columns.
- THE RARE METALS: Titanium.** By C. Baskerville. E. & M. J., vol. 87, p. 10. 4 columns.
- THE RARE METALS: Thorium.** By C. Baskerville. E. & M. J., vol. 86, p. 1241. 4 columns.
- RARE METALS: Uranium.** By C. Baskerville. E. & M. J., vol. 87, p. 257. 4 columns.
- RARE METALS: Vanadium.** By C. Baskerville. E. & M. J., vol. 87, p. 518. 3 columns.
- THE PRESENT SOURCE AND USES OF VANADIUM.** By J. K. Smith. T. A. I. M. E., vol. 38, p. 698. 6 pages.
- FLUORSPAR GRADES AND MARKETS.** By F. J. Fohs. Min. & Sci. Press, vol. 99, p. 720. 3½ columns.
- FLUORSPAR.** By F. J. Fohs. Min. & Sci. Press, vol. 98, p. 888. 5 columns.
- PROPERTIES AND TESTS OF FULLER'S EARTH.** By J. T. Porter. U. S. G. S., Bull. 315, p. 268. 22½ pages, 1906.
- FULLER'S EARTH.** P. C. M. & M. Soc. S. A., vol. 9, p. 276. 1½ columns.
- FULLER'S EARTH.** M. & M., vol. 29, p. 54. 1½ columns. I.
- FULLER'S EARTH.** E. & M. J., vol. 87, p. 1000. 2 columns.
- NOTES ON VARIOUS GLASS SANDS, MAINLY UNDEVELOPED.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 377. 6 pages. 1906.
- THE REQUIREMENTS OF SAND AND LIMESTONE FOR GLASS MAKING.** By E. F. Burchard. U. S. G. S., Bull. 285, p. 452. 7 pages. 1905.
- NATURAL GAS.** By J. D. Weeks. U. S. G. S., Mineral Resources, 1886, vol. 8.
- NATURAL GAS.** P. E. Soc. W. Pa., vol. 2, p. 331, 27½ pages; p. 401, 10 pages.
- THE GREATEST GEM MINE IN THE WORLD.** P. C. M. & M. Soc. S. A., vol. 7, p. 99. ½ column.
- LODES AND QUARTZ VEINS OF GOLD.** By A. Waddington. Min. Mag., vol. 2, p. 21. 3 pages.
- THE GREAT GOLD MINES.** By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 10, 7½ columns, I.; p. 161, 5½ columns, I.
- GRANITES.** By G. Surt. Min. & Sci. Press, vol. 99, p. 712. 5 columns. I.
- GRAPHITE: Its Occurrence and Use.** M. & M., vol. 30, p. 394. 3½ columns. I.
- GYPSUM MINING.** By W. J. Jones. M. & M., vol. 29, p. 490. 1½ columns. I.
- THE SUPPLY OF IRON.** By J. F. Kemp. Min. Mag., London, vol. 3, p. 363. 7 columns.
- THE SUPPLIES AND RESERVES OF IRON ORES.** By J. Birkinbine. J. C. M. I., vol. 10, p. 134. 14½ pages.
- MAGNETIC IRON ORE: Magnetite, Magnetic Oxide of Iron, and Lode-stone.** Min. Mag., vol. 4, p. 121. 14 pages.
- THE BLACK BAND, OR MUSHET IRON-STONE.** Min. Mag., vol. 4, p. 19. 9½ pages.
- ON THE OCCURRENCE OF ORES OF IRON IN THE AZOIC SYSTEM.** By J. D. Whitney. Min. Mag., vol. 7, p. 67. 4 pages.

- FRANKLINITE IRON ORES:** Their Uses and Quantity. Min. Mag., vol. 10, p. 105. 4 pages.
- AGGLOMERATION OF MANGANIFEROUS LIMONITE ORE.** By F. Witte. E. & M. J., vol. 90, p. 216. 4½ columns. I.
- LITHOGRAPHIC STONE.** By S. J. Kubel. U. S. G. S., Mineral Resources, 1900. 4 pages.
- LEAD INDUSTRY.** By C. Kirchoff, Jr. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- MANGANESE-ORE IN UNUSUAL FORM.** By W. P. Blake. T. A. I. M. E., vol. 41, p. 647. 2½ pages.
- USES OF MANGANESE.** By E. C. Harder. U. S. G. S., Bull. 427, p. 243. 24 pages.
- See also UNITED STATES.
- MICA:** Its Characteristics and Commerce. E. & M. J., vol. 87, p. 941. 3 columns.
- PETROLEUM:** Occurrence and Use. By Max Livingston. P. E. Soc. W. Pa., vol. 2, p. 193. 14 columns.
- THE OIL-SHALES OF THE MARITIME PROVINCES.** By R. W. Ellis. J. M. Soc. N. S., vol. 14, p. 1. 12½ pages.
- ECONOMIC POSSIBILITIES OF AMERICAN OIL SHALES.** By C. Baskerville. E. & M. J., vol. 88, p. 149, 15½ columns, I.; p. 195, 13½ columns, I.
- OCCURRENCE OF OIL AND GAS.** By W. Forstner. Min. & Sci. Press, vol. 101, p. 634. 8½ columns. I.
- CLASSIFICATION OF PETROLEUM AND NATURAL GAS FIELDS BASED ON STRUCTURE.** By F. G. Clapp. Min. & Sci. Press., vol. 101, p. 80. ½ column.
- S. PEARSON AND SON'S UNCONTROLLABLE OIL GUSHER.** E. & M. J., vol. 87, p. 7. 9 columns. I.
- THE USE OF GEOLOGICAL SCIENCE IN THE PETROLEUM AND NATURAL GAS BUSINESS.** By F. G. Clapp. P. E. Soc. W. Pa., vol. 26, p. 87. 34 pages. I.
- PLATINUM.** By F. W. Horton. U. S. G. S., Mineral Resources, 1905. 12 pages.
- THE GEOLOGICAL RELATIONS AND DISTRIBUTION OF PLATINUM AND ASSOCIATED METALS.** By J. F. Kemp. U. S. G. S., Bull. 193, 95 pages. I. 1902.
- PHOSPHATE CLAIMS ON PUBLIC LANDS.** Min. & Sci. Press, vol. 98, p. 862. 4½ columns.
- See also UNITED STATES.
- PHOSPHATE DEPOSITS OF OCEAN AND PLEASANT ISLANDS.** By F. D. Powers. T. A. I. M. E., vol. 10, p. 213. 20 pages. I.
- INVESTIGATION ON THE ROCK GUANO FROM THE ISLANDS OF THE CARIBBEAN SEA.** By W. J. Taylor. Min. Mag., vol. 8, p. 438. 11 pages.
- QUICKSILVER PRODUCTION IN FOREIGN COUNTRIES.** By H. W. Turner. Min. & Sci. Press, vol. 100, p. 16. 1½ columns.
- RARE MERCURY ORES.** By C. G. Dennis. Min. & Sci. Press, vol. 95, p. 92. 1 column. I.
- THE RUBY.** By M. R. Ward. M. & M., vol. 31, p. 319. 3½ columns. I.
- BLACK SANDS.** By A. R. Townsend. E. & M. J., vol. 85, p. 307. 4½ columns.
- METALLIC SULPHIDES IN ALLUVIAL GOLD DEPOSITS.** By F. L. Garrison. Min. & Sci. Press, vol. 101, p. 812. 2 columns.
- SILVER:** History and Mode of Occurrence. By T. F. Van Wagenen. Min. & Sci. Press, vol. 97, p. 392. 7½ columns.
- A NEW SOURCE OF SUPPLY OF SULPHUR.** T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- BIBLIOGRAPHY OF TIN-DEPOSITS IN NORTH AMERICA.** T. A. I. M. E., vol. 38, p. 682. 1 page.
- See also UNITED STATES.

NIGERIAN TIN MINING. E. & M. J., vol. 90, p. 1299. $\frac{1}{2}$ column.

TUNGSTEN: Its Occurrence and Use. M. & M., vol. 30, p. 387. $\frac{1}{2}$ column.

RARE METALS: Tungsten. By C. Baskerville. E. & M. J., vol. 87, p. 203. $2\frac{1}{2}$ columns.

Africa

SOUTH AFRICAN COALS AND THEIR ECONOMICS. By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 9, p. 330, $9\frac{1}{2}$ columns; p. 391, 6 columns. D.

SOUTH AFRICAN COALS AND THEIR ECONOMICS. By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 10, p. 92. 5 columns.

KATANGA COPPER BELT, BELGIAN CONGO. By F. E. Studt. Min. & Sci. Press, vol. 99, p. 857. $1\frac{1}{2}$ columns.

THE COPPER DEPOSITS OF KATANGA, CONGO. E. & M. J., vol. 86, p. 1049. 2 columns.

THE COPPER MINES OF KATANGA, CONGO FREE STATE. E. & M. J., vol. 85, p. 202. $3\frac{1}{2}$ columns.

COPPER IN THE BELGIAN CONGO. T. A. I. M. E., vol. 41, p. 196. 8 pages. I.

THE DIAMOND INDUSTRY IN SOUTH AFRICA. E. & M. J., vol. 85, p. 1106. $\frac{1}{2}$ column.

SOUTH AFRICAN DIAMOND MINE. E. & M. J., vol. 87, p. 1240. $1\frac{1}{2}$ columns.

PREMIER DIAMOND MINE, NEAR PRETORIA, TRANSVAAL. By E. M. Weston. E. & M. J., vol. 89, p. 369. $10\frac{1}{2}$ columns. I.

VISIT TO PREMIER DIAMOND MINE. P. C. M. & M. Soc. S. A., vol. 9, p. 209. $5\frac{1}{2}$ columns. I.

DIAMOND MINING AT DE BEERS. P. C. M. & M. Soc. S. A., vol. 7, p. 227. $4\frac{1}{2}$ columns.

THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHOFF DISTRICT, SOUTH AFRICA. By J. P. Johnson. T. I. M. & M., vol. 17, p. 277. 8 pages.

DIAMOND MINES AND ALLUVIAL DEPOSITS, SOUTH AFRICA: The Method Employed in Winning Diamonds on the Vaal River Alluvial Fields. By P. R. Day. T. Au. I. M. E., vol. 6, p. 87. 6 pages. I.

ALLUVIAL DIAMOND MINING, SOUTH AFRICA. By P. B. Holte. M. & M., vol. 29, p. 37. 2 columns. I.

SOME NOTES ON BANKET DEPOSITS, WITH SPECIAL REFERENCE TO THOSE MET WITH AT THE DENNY-DALTON GOLD FIELDS, VRYHEID DISTRICT, SOUTH AFRICAN REPUBLIC, AND THE PROCESS OF TREATMENT EMPLOYED THERE. By G. A. Denny. T. Au. I. M. E., vol. 3, p. 75. 16 pages. I.

THE CROWN MINES, LTD. M. & M., vol. 31, p. 691. $2\frac{1}{2}$ columns.

CONSOLIDATED GOLD FIELDS OF SOUTH AFRICA, LTD. By E. M. Weston. E. & M. J., vol. 85, p. 355. $3\frac{1}{2}$ columns. I.

THE ROBINSON MINE, SOUTH AFRICA. By J. B. Pritchford. Min. & Sci. Press, vol. 97, p. 606. 5 columns.

PRESENT MINING CONDITIONS ON THE RAND: Discussion of the paper of Thomas H. Leggett, p. 211. T. A. I. M. E., vol. 39, p. 856. $2\frac{1}{2}$ pages.

NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 8, p. 255, 23 columns, I.; p. 305, 1 column; p. 346, $12\frac{1}{2}$ columns; p. 381, 3 columns; vol. 9, p. 13, 15 columns, I.; p. 48, 1 column; p. 82, 24 columns, I.

THE GREAT MINES OF THE RAND. By T. A. Rickard. Min. Mag., London, vol. 2, p. 213. $7\frac{1}{2}$ columns. I.

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E., vol. 39, p. 211. $12\frac{1}{2}$ pages.

- REMINISCENCES OF THE EARLY RAND. By M. H. Coombe. P. C. M. & M. Soc. S. A., vol. 9, p. 38, 7½ columns; p. 123, 5 columns; p. 204, 4 columns; p. 227, 10 columns, I.; p. 272, 5 columns.
- PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. E. & M. J., vol. 85, p. 1239. 10 columns.
- FURTHER NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 276, 11½ columns, I.; p. 319, 1½ columns; p. 449, 6 columns; p. 394, 8½ columns, I.
- REMINISCENCES OF THE EARLY RAND. By J. S. MacArthur. E. & M. J., vol. 88, p. 357. 4½ columns.
- MINING CONDITIONS ON THE RAND. By T. H. Leggett. Min. & Sci. Press, vol. 96, p. 812. 9½ columns. I.
- THE PRINCIPAL MINES OF THE TRANSVAAL. Min. & Sci. Press, vol. 96, p. 10. 2 columns. Table.
- VISITING THE GOLD COAST, WEST AFRICA. By F. F. Sharpless. Min. & Sci. Press, vol. 101, p. 800. 7 columns. Map.
- A WEST AFRICAN GOLD MINE. E. & M. J., vol. 87, p. 1005. 1½ columns.
- THE WEST AFRICAN GOLDFIELD. E. & M. J., vol. 87, p. 905. 1 column.
- WEST AFRICA, THE GOLD COAST COLONY, AND ASHANTI IN 1908. By W. F. Wilkinson. E. & M. J., vol. 87, p. 196. 3½ columns.
- EARLY DAYS ON THE GOLD COAST. By E. T. McCarthy. Min. Mag., London, vol. 1, p. 291. 6½ columns.
- WEST AFRICAN MINES. By J. H. Curle. Min. Mag., London, vol. 1, p. 42. 6 columns. I.
- GOLD MINING IN WEST AFRICA. E. & M. J., vol. 85, p. 1282. 1 column.
- THE BARBERTON GOLDFIELD IN SWAZILAND. E. & M. J., vol. 89, p. 669. 2½ columns.
- THE BARBERTON GOLDFIELD, SOUTH AFRICA. By A. Richardson. P. C. M. & M. Soc. S. A., vol. 10, p. 122. 25 columns.
- THE PILGRIM'S REST GOLD FIELDS AND MINING METHODS. By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 9, p. 293, 16 columns, I.; p. 349, 3½ columns; p. 395, 2 columns, I.
- NOTES ON THE GOLD OF THE ROODEPOORT DISTRICT. By G. Andrioli. J. C. M. & M. Soc. S. A., vol. 5, p. 73, 4 columns; p. 152, 1 column.
- MINING IN SOUTHERN RHODESIA. By A. H. Ackermann. Min. Mag., London, vol. 2, p. 138. 6 columns. I.
- SMALL MINES OF RHODESIA. By B. I. Collings. P. C. M. & M. Soc. S. A., vol. 9, p. 76, 10 column; p. 126, 5½ columns; p. 166, 2½ columns; p. 206, 2 columns; p. 275, 1½ columns.
- STAR OF THE CONGO MINE. Min. & Sci. Press, vol. 100, p. 260. ¾ columns. I.
- MINING-CONDITIONS IN THE BELGIAN CONGO (CONGO FREE STATE). By S. H. Ball and M. K. Shaler. T. A. I. M. E., vol. 41, p. 189. 9 pages. I.
- THE NEW GOCH GOLD MINES, LTD. P. C. M. & M. Soc. S. A., vol. 5, p. 57. 10 columns.
- IRON IN THE BELGIAN CONGO. T. A. I. M. E., vol. 41, p. 210. 4 pages.
- OILS OF WEST AFRICA. E. & M. J., vol. 87, p. 1037. 3 columns.
- BITUMEN AND OILS IN WEST AFRICA. By T. H. Boorman. E. & M. J., vol. 87, p. 1037. 3 columns.
- THE SOUTH AFRICAN TIN-DEPOSITS. By W. R. Humboldt. T. A. I. M. E., vol. 39, p. 783. 7 pages. I.
- TIN DEPOSITS OF THE TRANSVAAL. E. & M. J., vol. 88, p. 778. 2½ columns.
- NOTES ON TIN MINING IN CAPE COLONY. By H. D. Griffiths. P. C. M. & M. Soc. S. A., vol. 8, p. 167, 28 columns. I.

- TIN MINING AND ORE DRESSING IN SOUTH AFRICA.** By E. M. Weston. E. & M. J., vol. 89, p. 411, 7½ columns, I.; p. 470, 7 columns, I.; p. 573, 7 columns, I.
- TIN IN THE BELGIAN CONGO.** T. A. I. M. E., vol. 41, p. 209. 2 pages. I.
- THE GROENFONTEIN TIN MINES.** By E. M. Weston. E. & M. J., vol. 90, p. 515. ¼ column. I.
- PHOSPHATES IN TUNIS.** E. & M. J., vol. 88, p. 177. 1½ columns.
- THE MINING INDUSTRY IN ALGERIA AND TUNIS.** By M. Clere. E. & M. J., vol. 88, p. 460. 9½ columns. I.
- See also MISCELLANEOUS PRODUCTION.
- Alabama**
- ECONOMIC FEATURES OF THE BIRMINGHAM DISTRICT.** By J. L. Pultz. E. & M. J., vol. 88, p. 299. 15 columns. I.
- OPERATING COMPANIES OF BIRMINGHAM DISTRICT.** By J. L. Pultz. E. & M. J., vol. 88, p. 345. 11½ columns. I.
- THE CLAYS AND OCHERS OF ALABAMA.** By E. A. Smith. E. & M. J., vol. 85, p. 1088. ¼ column.
- See also OCCURRENCE OF IRON ORES.
- CLAYS OF THE BIRMINGHAM DISTRICT, ALABAMA.** By C. Butts. U. S. G. S., Bull. 315, p. 291. 4 pages. 1906.
- FUELS OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400, 204 pages. I. 1910.
- THE WARRIOR COAL BASIN IN THE BIRMINGHAM QUADRANGLE, ALABAMA.** By C. Butts. U. S. G. S., Bull. 285, p. 211. 12 pages. I. 1905.
- LAHAUSAGE MINE, ALABAMA.** By A. W. Evans. M. & M., vol. 30, p. 77. 4½ columns. I.
- THE COOSA COAL FIELD OF ALABAMA.** By W. F. Prouty. E. & M. J., vol. 88, p. 921. 4 columns. I. Sections and Maps.
- THE NORTHERN PART OF THE COHABA COAL FIELD, ALABAMA.** By C. Butts. U. S. G. S., Bull. 316, p. 76. 40 pages. I. 1906.
- NOTES ON SOME GOLD DEPOSITS OF ALABAMA.** By H. D. McCaskey. U. S. G. S., Bull. 340, p. 36. 17 pages. 1907.
- IRON ORES, FUELS AND FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.
- IRON OPERATIONS OF THE BIRMINGHAM DISTRICT.** By E. Higgins. E. & M. J., vol. 86, p. 1043. 18½ columns. I.
- IRON OPERATIONS IN NORTHEASTERN ALABAMA.** By E. Higgins. E. & M. J., vol. 86, p. 1083. 12 columns. I.
- THE IRON ORE INDUSTRY IN ALABAMA.** By E. A. Smith. E. & M. J., vol. 85, p. 1159. 4 columns.
- AN ESTIMATE ON THE TONNAGE OF AVAILABLE CLINTON IRON ORE IN THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 340, p. 308. 10 pages. I. 1907.
- THE CLINTON OR RED ORES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 130. 21½ pages. 1906.
- THE CLINTON IRON-ORE DEPOSITS OF ALABAMA.** By E. F. Burchard. T. A. I. M. E., vol. 40, p. 75. 59 pages. I.
- THE BROWN IRON ORES OF THE RUSSELLVILLE DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 152. 7 pages. 1906.
- THE GRAY IRON ORES OF TALLADEGA COUNTY, ALABAMA.** By P. S. Smith. U. S. G. S., Bull. 315, p. 161. 23½ pages. 1906.
- LIMESTONE AND DOLOMITE IN THE BIRMINGHAM DISTRICT, ALABAMA.** By C. Butts. U. S. G. S., Bull. 315, p. 247. 9 pages. 1906.

SAND-LIME BRICKMAKING NEAR BIRMINGHAM, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 256. 2 pages. 1906.

KELLERMAN MINE, KELLERMAN, ALABAMA. By N. Hutchins. M. & M., vol. 31, p. 204. 4½ columns. I.

Alaska

GEOGRAPHICAL DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 187. 446 pages. 1901.

GEOGRAPHIC DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 299. 690 pages. 1906.

THE GEOGRAPHY AND GEOLOGY OF ALASKA. By A. H. Brooks. U. S. G. S., Professional Paper 45. 327 pages. I. 1906.

ALASKAN GEOGRAPHIC NAMES. By M. Baker. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 487-509, 1899-1900.

RECENT DEVELOPMENTS IN MINING IN THE SOUTHERN YUKON. By D. D. Cairnes. J. C. M. I., vol. 10, p. 207. 9 pages.

ECONOMIC DEVELOPMENTS IN SOUTHEASTERN ALASKA. By F. E. and C. W. Wright. U. S. G. S., Bull. 259, p. 47. 21½ pages.

MINING IN SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 379, p. 67. 20 pages. I. 1908.

MINING IN SOUTHEASTERN ALASKA. By A. Knopf. U. S. G. S., Bull. 442, p. 133. 11 pages. 1909.

THE MINING INDUSTRY OF 1908. By A. H. Brooks. U. S. G. S., Bull. 379, p. 21. 44 pages. I. 1908.

THE MINING INDUSTRY OF ALASKA IN 1909. By A. H. Brooks. U. S. G. S., Bull. 442, p. 20. 27 pages. 1909.

OUTLINE OF THE GEOLOGY AND MINERAL RESOURCES OF THE ILLIAMNA AND CLARK LAKES REGION. By G. C. Martin and F. J. Katz. U. S. G. S., Bull. 442, p. 179. 22 pages. I. 1909.

GEOLOGY AND MINERAL RESOURCES OF THE BERNERS BAY REGION, ALASKA. By A. Knopf. U. S. G. S., Bull. 446, 58 pages. I.

MINERAL RESOURCES OF KATSINA-CHITINA REGION, ALASKA. By F. H. Moffit and A. G. Maddren. U. S. G. S., Bull. 374, 103 pages. I. 1909.

MINERAL RESOURCES OF ALASKA IN 1907. By A. H. Brooks. U. S. G. S., Bull. 345. 294 pages. I. 1908.

MINERAL RESOURCES OF THE NULATO-COUNCIL REGION, ALASKA. By P. S. Smith and H. M. Eakin. U. S. G. S., Bull. 442, p. 316. 37 pages. I. 1909.

PRELIMINARY REPORT ON THE MINERAL RESOURCES OF THE SOUTHERN PART OF KENAI PENINSULA, ALASKA. By G. S. Grant and D. F. Higgins. U. S. G. S., Bull. 442, p. 166. 11 pages. I. 1909.

MINERAL RESOURCES OF SOUTHWESTERN ALASKA. By W. W. Atwood. U. S. G. S., Bull. 379, p. 108. 44 pages. I. 1908.

MAP OF CENTRAL ALASKA SHOWING DISTRIBUTION OF MINERAL RESOURCES. U. S. G. S., Bull. 379, p. 24. I. 1908.

THE MINERAL RESOURCES OF THE KOTSINA AND CHITINA VALLEYS, COPPER RIVER REGION, ALASKA. By F. H. Moffit and A. G. Maddren. U. S. G. S., Bull. 345, p. 127. 50 pages. I. 1907.

THE DISTRIBUTION OF MINERAL RESOURCES IN ALASKA. By A. H. Brooks. U. S. G. S., Bull. 345, p. 18. 12 pages. 1907.

THE COPPER RIVER DISTRICT, ALASKA. By H. A. Keller. E. & M. J., vol. 85, p. 1273. 10½ columns. I.

SOME NOTES ON THE COPPER RIVER DISTRICT, ALASKA. By W. M. Brewer. J. C. M. I., vol. 11, p. 415. 8 pages. I.

THE GEOLOGY AND MINERAL RESOURCES OF A PORTION OF THE COPPER RIVER DISTRICT, ALASKA. By

- F. C. Schrader and A. C. Spencer. U. S. G. S., Special Publications, 1901. 94 pages. I.
- THE COPPER RIVER DISTRICT, ALASKA. By W. M. Brewer. Min. & Sci. Press, vol. 96, p. 71, 4 columns, I.; p. 101, 2½ columns.
- KETCHIKAN AND WRANGELL MINING DISTRICTS, ALASKA. By F. E. and C. W. Wright. U. S. G. S., Bull. 347. 210 pages. I. 1908.
- MINERAL RESOURCES OF THE MOUNT WRANGELL DISTRICT, ALASKA. By W. C. Mendenhall and F. C. Schrader. U. S. G. S., Professional Paper 15. 71 pages. I. 1903.
- MINING IN THE WRANGELL DISTRICT, ALASKA. Min. & Sci. Press, vol. 96, p. 199. 5½ columns. I.
- A RECONNAISSANCE OF THE CAPE NOME AND ADJACENT GOLD FIELDS OF SEWARD PENINSULA, ALASKA, IN 1900. By A. H. Brooks, G. B. Richardson, and A. J. Collier. U. S. G. S., Special Publications, 1900. 222 pages. I.
- RECONNAISSANCE OF THE GEOLOGY AND MINERAL RESOURCES OF PRINCE WILLIAM SOUND, ALASKA. By U. S. Grant and D. F. Higgins. U. S. G. S., Bull. 443. 89 pages. I. 1910.
- GEOLOGY AND MINERAL RESOURCES OF THE SOLOMON AND CASCADE-PAGO QUADRANGLES, SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 433. 234 pages. I.
- MINING IN SEWARD PENINSULA. By F. F. Henshaw. U. S. G. S., Bull. 442, p. 353. 18 pages. 1909.
- RECENT DEVELOPMENTS IN SOUTHERN SEWARD PENINSULA. By P. S. Smith. U. S. G. S., Bull. 379, p. 267. 35 pages. I. 1908.
- NOTES ON THE GEOLOGY AND MINERAL PROSPECTS IN THE VICINITY OF SEWARD, KENAI PENINSULA. By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 98. 10 pages. I. 1908.
- INVESTIGATIONS OF THE MINERAL DEPOSITS OF SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 345, p. 206. 44 pages. I. 1907.
- THE MINERAL DEPOSITS OF THE LOST RIVER AND BROOKS MOUNTAIN REGION, SEWARD PENINSULA, ALASKA. By A. Knopf. U. S. G. S., Bull. 345, p. 268. 4 pages. 1907.
- GEOLOGY AND MINERAL RESOURCES OF IRON CREEK, ALASKA. By P. S. Smith. U. S. G. S., Bull. 314, p. 157. 7 pages. I. 1906.
- A RECONNAISSANCE IN THE NORTON BAY REGION, ALASKA, IN 1900. By W. C. A. Mendenhall. U. S. G. S., Special Publications, 1900. 222 pages. I.
- MINERAL RESOURCES OF THE NABESNA-WHITE RIVER DISTRICT, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 417. 64 pages. I. 1910.
- THE FORTYMILE QUADRANGLE, YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 375. 52 pages. I. 1909.
- THE FAIRBANKS AND RAWPORT QUADRANGLE, YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- GEOLOGY AND MINERAL RESOURCES OF THE CONTROLLER BAY REGION, ALASKA. By G. C. Martin. U. S. G. S., Bull. 335. 141 pages. I. 1908.
- THE CIRCLE PRECINCT, ALASKA. By A. H. Brooks. U. S. G. S., Bull. 314, p. 187. 18 pages. 1906.
- THE YUKON-TANANA REGION, ALASKA. Description of Circle Quadrangle. By L. M. Prindle. U. S. G. S., Bull. 295. 27 pages. I. 1906.
- MINERAL RESOURCES OF THE KENAI PENINSULA, ALASKA. By F. H. H. Moffit. U. S. G. S., Bull. 277. 88 pages. I. 1906.
- MINING IN THE CHITINA DISTRICT, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 442, p. 158. 6 pages. 1909.

- MINERAL RESOURCES OF THE NABESNA-WHITE RIVER DISTRICT, ALASKA.** By F. H. Moffit and A. Knopf. U. S. G. S., Bull. 379, p. 161. 20 pages. I. 1908.
- MINING IN THE KOTSINA-CHITINA, CHISTOCHINA, AND VALDEZ CREEK REGIONS.** By F. H. Moffit. U. S. G. S., Bull. 379, p. 153. 8 pages. I. 1908.
- THE KONGARCK REGION, ALASKA.** By A. H. Brooks. U. S. G. S., Bull. 314, p. 164. 16 pages. I. 1906.
- THE BONNIFIELD AND KANTISHNA REGIONS, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 314, p. 205. 22 pages. I. 1906.
- RECONNAISSANCE ON THE PACIFIC COAST FROM YOKUTAT TO ALSEK RIVER.** By G. Blackwelder. U. S. G. S., Bull. 314, p. 82. 7 pages. 1906.
- YUKON TERRITORY WEST OF LEWIS RIVER.** By D. D. Cairnes. Min. & Sci. Press, vol. 99, p. 29. 2 columns.
- THE WHEATON RIVER ANTIMONY DEPOSITS, YUKON TERRITORY.** By D. D. Cairnes. J. C. M. I., vol. 13, p. 297. 11½ pages. I.
- NONMETALLIFEROUS MINERAL RESOURCES OF SOUTHEASTERN ALASKA.** By C. W. Wright. U. S. G. S., Bull. 314, p. 73. 8 pages. 1906.
- THE ALASKA COAL FIELDS.** By G. C. Martin. U. S. G. S., Bull. 314, p. 40. 7 pages. I. 1906.
- ALASKA COAL AND ITS UTILIZATION.** By A. H. Brooks. U. S. G. S., Bull. 442, p. 47. 54 pages. I. 1909.
- COAL RESOURCES OF SOUTHWESTERN ALASKA.** By R. W. Stone. U. S. G. S., Bull. 259, p. 151. 21 pages. I.
- BERING RIVER COAL FIELD.** By G. C. Martin. U. S. G. S., Bull. 259, p. 140. 10½ pages. I.
- THE BERING RIVER COALFIELD OF ALASKA.** By L. W. Storm. E. & M. J., vol. 90, p. 272. 9½ columns. I.
- THE BERING RIVER COAL DEPOSITS, ALASKA.** By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.
- CONTROLLER BAY COAL FIELD, ALASKA.** By G. W. Evans. M. & M., vol. 30, p. 449, 8 columns, I.; p. 552, 6½ columns. I.
- COAL FIELDS OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 259, p. 172. 3½ pages.
- COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- GEOLOGY AND COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- COAL DEPOSITS OF THE SKEENA RIVER.** J. C. M. I., vol. 10, p. 223. 6 pages. Map.
- THE COAL FIELDS OF THE KACHEMAK BAY REGION.** By R. W. Stone. U. S. G. S., Bull. 277. 88 pages. I. 1906.
- A RECONNAISSANCE OF THE MATANUSKA COAL FIELD, ALASKA, IN 1905.** By G. C. Martin. U. S. G. S., Bull. 289. 36 pages. I. 1906.
- COPPER DEPOSITS OF PRINCE WILLIAM SOUND, ALASKA.** By U. S. Grant. Min. & Sci. Press, vol. 100, p. 63. 4 columns. I.
- COPPER MINING AND PROSPECTING OF PRINCE WILLIAM SOUND.** By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 87. 10 pages. I. 1908.
- NOTES ON COPPER PROSPECTS OF PRINCE WILLIAM SOUND.** By F. H. Moffit. U. S. G. S., Bull. 345, p. 176. 3 pages. I. 1907.
- OPENING OF THE CHITINA COPPER BELT IN ALASKA.** By D. Donohoe. E. & M. J., vol. 90, p. 1306. 6 columns. I.
- CHITINA COPPER REGION IN SOUTHERN ALASKA.** By L. W. Storm. E. & M. J., vol. 90, p. 1011. 7½ columns. Map.

- CHITINA VALLEY COPPER DEPOSITS, ALASKA. By E. Jacobs. *M. & M.*, vol. 31, p. 315. 6½ columns. I.
- OCCURRENCE OF COPPER IN CHITINA VALLEY, ALASKA. *M. & M.*, vol. 31, p. 315. 6½ columns. I.
- BONANZA COPPER MINE, ALASKA. By U. H. Wilhelm. *Min. & Sci. Press*, vol. 101, p. 569. 2½ columns. I.
- BONANZA COPPER MINE, ALASKA. By U. H. Wilhelm. *M. & M.*, vol. 31, p. 441. 1½ columns. Map.
- COPPER DEPOSITS OF WHITE HORSE. By T. A. Rickard. *Min. & Sci. Press*, vol. 97, p. 778. 3½ columns. I.
- THE WHITEHORSE COPPER BELT, YUKON TERRITORY. E. & M. J., vol. 89, p. 963. 2½ columns.
- WHITE RIVER COPPER PROPERTIES. By G. A. R. Lewington. *Min. & Sci. Press*, vol. 99, p. 755. 2½ columns. I.
- THE KENNICOTT BONANZA COPPER MINE, ALASKA. By L. W. Storm. E. & M. J., vol. 89, p. 1224. 9½ columns. I.
- COPPER DEPOSITS ON KASAAN PENINSULA, PRINCE OF WALES ISLAND. By C. W. Wright and S. Paige. U. S. G. S., Bull. 345, p. 98. 18 pages. I. 1907.
- SOME ECONOMIC GOLD DEPOSITS OF ALASKA. By F. C. Lincoln. E. & M. J., vol. 90, p. 551. 11 columns.
- GOLD MINING IN ALASKA. By A. H. Brooks. E. & M. J., vol. 85, p. 311. 3 columns.
- AURIFEROUS QUARTZ VEINS IN THE FAIRBANKS DISTRICT, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 442, p. 210. 20 pages. I. 1909.
- AURIFEROUS QUARTZ VEINS ON UNALASKA ISLAND. By A. J. Collier. U. S. G. S., Bull. 259, p. 102. 2 pages.
- GOLD DEPOSITS OF THE SHUMAGIN ISLANDS. By G. C. Martin. U. S. G. S., Bull. 259, p. 100. 2 pages.
- OCCURRENCE OF GOLD IN TREADWELL ORE DEPOSITS. U. S. G. S., Bull. 259, p. 82. ½ page.
- THE ALASKA - TREADWELL MINES. *Min. Mag.*, London, vol. 2, p. 142, 2 columns, I.; vol. 3, p. 278, 4 columns, I.
- THE TREADWELL ORE DEPOSITS. *Min. & Sci. Press*, vol. 95, p. 117. 6½ columns. I.
- THE TREADWELL GROUP OF MINES. By A. C. Spencer. *Min. & Sci. Press*, vol. 95, p. 117. 6½ columns. I.
- THE JUNEAU GOLD BELT, ALASKA. By A. C. Spencer. U. S. G. S., Bull. 287. 161 pages. I. 1906.
- LODE MINING IN SOUTHEASTERN ALASKA, 1907. By C. W. Wright. U. S. G. S., Bull. 345, p. 78. 20 pages. I. 1907.
- LODE MINING IN SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 314, p. 47. 28 pages. I. 1906.
- YAKUTAT BAY REGION. *Min. & Sci. Press*, vol. 99, p. 719. 1 column.
- MINING ON PRINCE OF WALES ISLAND, ALASKA. By W. A. Scott. *Min. & Sci. Press*, vol. 98, p. 885. 3½ columns. I.
- MINING AT SHUNGUAK, ALASKA. By L. Lloyd. *Min. & Sci. Press*, vol. 101, p. 109. 2 columns. I.
- THE KOYNEKUK-CHANDLAR GOLD REGION, ALASKA. By A. G. Maddren. U. S. G. S., Bull. 442, p. 284. 32 pages. I. 1909.
- GOLD OF PRINCE WILLIAM SOUND. By U. S. Grant. U. S. G. S., Bull. 379, p. 97. 1 page. 1908.
- GOLD FIELDS OF THE SOLOMON AND NINKLUK RIVER BASINS. By P. S. Smith. U. S. G. S., Bull. 314, p. 146. 11 pages. 1906.
- OCCURRENCE OF GOLD IN THE YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 345, p. 179. 10 pages. I. 1907.

- PLACER GOLD DEPOSITS OF ALASKA.** E. & M. J., vol. 90, p. 551. 6 columns.
- NEW PLACES IN ALASKA.** Min. & Sci. Press, vol. 97, p. 842. 2 columns. Map.
- RAMPART PLACER REGION.** By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 259, p. 104. 15 pages.
- THE RAMPART PLACER, YUKON-TANANA REGION, ALASKA.** By F. J. Hess. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- THE RAMPART GOLD PLACER REGION, ALASKA.** By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 280. 54 pages. I. 1906.
- THE GOLD PLACERS OF THE FORTY-MILE, BIRCH CREEK, AND FAIRBANKS REGIONS, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 251. 89 pages. I. 1905.
- THE FORTYMILE GOLD-PLACER DISTRICT, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 345, p. 187. 12 pages. 1907.
- THE INNOKO GOLD-PLACER DISTRICT, ALASKA; WITH ACCOUNTS OF THE CENTRAL KUSKOKWIN VALLEY AND THE RUBY CREEK AND GOLD HILL PLACERS.** By A. G. Maddren. U. S. G. S., Bull. 410. 87 pages. I. 1910.
- GOLD PLACERS OF THE INNOKO DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 238. 29 pages. 1908.
- PRELIMINARY REPORT ON THE CAPE NOME GOLD REGION, ALASKA.** By F. C. Schrader and A. H. Brooks. U. S. G. S., Special Publications, 1900. 56 pages. I.
- THE NOME REGION, ALASKA.** By F. H. Moffit. U. S. G. S., Bull. 314, p. 126. 18 pages. I. 1906.
- THE GOLD PLACERS OF TURNAGAIN ARM.** By F. H. Moffit. U. S. G. S., Bull. 259, p. 90. 9 pages. I.
- THE CAPE YAKTAZ PLACERS.** By G. C. Martin. U. S. G. S., Bull. 259, p. 88. 2 pages.
- THE IRON CREEK REGION.** By P. S. Smith. U. S. G. S., Bull. 379, p. 302. 53 pages. I. 1908.
- PLACERS OF THE GOLD HILL DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 234. 3 pages. 1908.
- GOLD PLACERS OF THE RUBY CREEK DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 229. 5 pages. I. 1908.
- THE GOLD PLACERS OF PARTS OF SEWARD PENINSULA, ALASKA, INCLUDING THE NOME, COUNCIL, KOUGAROK, PORT CLARENCE AND GOODHOPE PRECINCTS.** By A. J. Collier. U. S. G. S., Bull. 328. 343 pages. I. 1908.
- THE FAIRBANKS GOLD PLACER REGION.** By L. M. Prindle and F. J. Katz. U. S. G. S., Bull. 379, p. 181. 20 pages. I. 1908.
- YUKON GOLD.** By O. B. Perry. Min. & Sci. Press, vol. 96, p. 556. 3 columns.
- THE PORCUPINE PLACER DISTRICT, ALASKA.** By C. W. Wright. U. S. G. S., Bull. 236. 35 pages. I. 1904.
- THE FAIRHAVEN GOLD PLACERS OF THE SEWARD PENINSULA, ALASKA.** By F. H. Moffit. U. S. G. S., Bull. 247. 85 pages. I. 1905.
- GOLD PLACERS OF THE MULCHATNA, ALASKA.** By F. J. Katz. U. S. G. S., Bull. 442, p. 201. 1½ pages. 1909.
- PELLEY ROSS AND GRAVEL RIVERS.** By J. Keele. Min. & Sci. Press, vol. 99, p. 66. 2 columns.
- HAINES DISTRICT, ALASKA.** By W. A. Scott. Min. & Sci. Press, vol. 99, p. 198. 2½ columns. I.
- THE OCCURRENCE OF IRON ORE NEAR HAINES, SOUTHEASTERN ALASKA.** By A. Knopf. U. S. G. S., Bull. 442, p. 144. 3 pages. 1909.
- THE POSSIBLE USE OF PEAT FUEL IN ALASKA.** By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.
- THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA.** By C. A. Davis. U. S. G. S., Bull. 442, p. 101. 32 pages. 1909.

See also **THE UNITED STATES.**

NOTES ON THE PETROLEUM FIELDS OF ALASKA. By G. C. Martin. U. S. G. S., Bull. 259, p. 128. 11½ pages. I.

PETROLEUM AT CONTROLLER BAY. By G. C. Martin. U. S. G. S., Bull. 314, p. 89. 35 pages. I. 1906.

THE PETROLEUM FIELDS OF THE PACIFIC COAST OF ALASKA, WITH AN ACCOUNT OF THE BERING RIVER COAL DEPOSIT. By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.

KATALA, ALASKA, OIL FIELD. By W. T. Prosser. M. & M., vol. 31, p. 731. 1½ columns.

THE BUILDING STONES AND MATERIALS OF SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 345, p. 116. 10 pages. 1907.

MAKUSHIN SULPHUR DEPOSITS, UNALASKA. By N. O. Lawton. Min. & Sci. Press, vol. 98, p. 258. 4 columns. I.

RECENT DEVELOPMENT OF ALASKAN TIN DEPOSITS. By A. J. Collier. U. S. G. S., Bull. 259, p. 120. 7½ pages. I.

TIN IN YORK REGION, ALASKA. By A. H. Brooks. U. S. G. S., Mineral Resources. 1900.

GEOLOGY OF THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 358. 72 pages. I. 1908.

THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 345, p. 251. 18 pages. I. 1907.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.

TIN-DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. T. A. I. M. E., vol. 38, p. 669. 9 pages. I.

OCCURRENCE OF WOLFRAMITE AND CASSITERITE IN THE GOLD PLACERS

OF DEADWOOD CREEK, BIRCH CREEK DISTRICT, ALASKA. By B. L. Johnson. U. S. G. S., Bull. 442, p. 246. 5 pages. 1909.

Argentine Republic

MINING IN THE ARGENTINE. By C. Janin. Min. & Sci. Press, vol. 101, p. 574. 4 columns. Map.

PLACERS OF TIERRA DEL FUEGO. By S. H. Loram. Min. & Sci. Press, vol. 99, p. 125. 6½ columns.

Arizona

THE MINERAL DEPOSITS OF THE CERBAT RANGE, BLACK MOUNTAINS, AND GRAND WASH CLIFFS, MOHAVE COUNTY, ARIZONA. By F. C. Schrader. U. S. G. S., Bull. 340, p. 53. 31 pages. I. 1907.

THE ORE DEPOSITS OF SOUTHERN ARIZONA. Min. & Sci. Press, vol. 99, p. 359. 1 column.

A RECONNAISSANCE OF PARTS OF NORTHWESTERN NEW MEXICO AND NORTHERN ARIZONA. By N. H. Darton. U. S. G. S., Bull. 435, 88 pages. I. 1910.

THE GILA RIVER ALUM DEPOSITS. By C. W. Hays. U. S. G. S., Bull. 315, p. 215. 10 pages. I. 1906.

NOTES ON THE OCCURRENCE OF CINABAR IN CENTRAL WESTERN ARIZONA. By W. Bancroft. U. S. G. S., Bull. 430, p. 151. 3 pages. 1909.

THE CLIFTON-MORENCI DISTRICT OF ARIZONA. By W. L. Tovote. Min. & Sci. Press, vol. 101, p. 770; 6½ columns, Map; p. 831, 12 columns. I.

RECENT DEVELOPMENTS IN CLIFTON-MORENCI DISTRICT, ARIZONA. By A. W. Hixson. E. & M. J., vol. 85, p. 251. 1½ columns.

COPPER DEPOSITS OF SILVERBELL, ARIZONA. By C. F. Tolman. Min. & Sci. Press, vol. 99, p. 710. 5 columns. I.

- THE MIAMI COPPER MINE, ARIZONA.** By R. L. Herrick. *M. & M.*, vol. 30, p. 80. 9½ columns. I.
- MINING AT MIAMI, ARIZONA.** By R. L. Herrick. *M. & M.*, vol. 30, p. 751. 12 columns. I.
- COPPER MINING IN METCALF DISTRICT, ARIZONA.** By P. B. Scotland. *E. & M. J.*, vol. 90, p. 118. 16 columns. I.
- DISSEMINATED CHALCOCITE DEPOSITS AT RAY, ARIZONA.** By C. F. Tolman, Jr. *Min. & Sci. Press*, vol. 99, p. 622. 5½ columns. I.
- RAY COPPER DISTRICT, ARIZONA.** By W. H. Truesdale. *Min. & Sci. Press*, vol. 98, p. 794. 7½ columns. I.
- UNITED VERDE MINE, ARIZONA.** By L. C. Craton. *Min. & Sci. Press*, vol. 96, p. 171. 1½ columns. Map.
- ORE DEPOSITS IN THE VICINITY OF PARKER, ARIZONA.** *E. & M. J.*, vol. 88, p. 1171. 2 columns.
- THE SUPERIOR AND BOSTON MINE, ARIZONA.** By R. L. Herrick. *M. & M.*, vol. 31, p. 112. 8½ columns. I.
- COPPER DEPOSITS OF THE GLOBE-KELVIN DISTRICTS, ARIZONA.** By E. Higgins. *E. & M. J.*, vol. 89, p. 769, 11 columns, I.; p. 813, 9½ columns, I.; p. 870, 13½ columns, I.
- THE BISBEE COPPER FIELD.** *Min. & Sci. Press*, vol. 99, p. 358. 3 columns. I.
- STANLEY BUTTE DISTRICT, ARIZONA.** By F. Wolf, Jr. *Min. & Sci. Press*, vol. 101, p. 13. 1½ volumes. Map.
- COURTLAND ARIZONA, A NEW CAMP.** By H. W. Chittenden. *E. & M. J.*, vol. 87, p. 312. 1½ columns.
- THE SOUTHERN ARIZONA COPPER FIELDS.** By C. F. Tolman, Jr. *Min. & Sci. Press*, vol. 99, p. 356, 10 columns, I.; p. 390, 7½ columns, I.
- THE OCTAVE MINE, ARIZONA.** By J. E. Russell. *E. & M. J.*, vol. 85, p. 211. 1½ columns. I.
- THE GOLD ROAD MINE, ARIZONA.** By J. C. Kennedy. *Min. & Sci. Press*, vol. 101, p. 773. 1½ columns.
- NOTES ON THE PLACER DEPOSITS OF GREATERVILLE, ARIZONA.** By J. M. Hill. *U. S. C. S.*, Bull. 430, p. 11. 12 pages. I. 1909.
- MARBLE PROSPECTS IN THE CHIRICAHUA MOUNTAINS, ARIZONA.** By S. Paige. *U. S. G. S.*, Bull. 380, p. 299. 13 pages. I. 1908.
- SOME OCCURRENCES OF MOLYBDENITE IN THE SANTA RITA AND PATAGONIA MOUNTAINS, ARIZONA.** By F. C. Schrader and J. M. Hill. *U. S. G. S.*, Bull. 430, p. 154. 10 pages. I. 1909.
- A SILVER BEARING DIORITE IN SOUTHERN ARIZONA.** By J. Bond. *E. & M. J.*, vol. 89, p. 1268. 4 columns.
- NOTE ON THE OCCURRENCE OF TUNGSTEN MINERALS NEAR CALABASAS, ARIZONA.** By J. M. Hill. *U. S. G. S.*, Bull. 430, p. 164. 3 pages.
- A TUNGSTEN DEPOSIT IN WESTERN ARIZONA.** *E. & M. J.*, vol. 90, p. 1103. ½ column.
- THE TURQUOISE MINING DISTRICT, ARIZONA.** By J. M. Platt. *E. & M. J.*, vol. 87, p. 213. 1½ columns.
- THE ZINC DEPOSITS OF MOHAVE COUNTY, ARIZONA.** *E. & M. J.*, vol. 89, p. 775. 2½ columns.
- NOTE ON A WOLFRAMITE DEPOSIT IN THE WHEATSTONE MOUNTAINS, ARIZONA.** By F. L. Hess. *U. S. G. S.*, Bull. 380, p. 164. 2 pages. 1908.

Arkansas

- MINERAL DEPOSITS OF WESTERN ARKANSAS.** By W. C. B. Allen. *E. & M. J.*, vol. 89, p. 1328. 2 columns.
- THE ARKANSAS ANTIMONY DEPOSITS.** By F. L. Hess. *U. S. G. S.*, Bull. 340, p. 241. 12 pages. I. 1907.
- THE CLAYS OF ARKANSAS.** By J. C. Branner. *U. S. G. S.*, Bull. 351, 247 pages. I. 1908.

CLAYS OF GARLAND COUNTY, ARKANSAS. By E. C. Eckel. U. S. G. S., Bull. 285, p. 407. 3½ pages. 1905.

THE ARKANSAS COAL FIELD. By A. J. Collier. U. S. G. S., Bull. 316, p. 137. 25 pages. I. 1906.

THE ARKANSAS COAL FIELD. By A. J. Collier. U. S. G. S., Bull. 326, 158 pages. I. 1907.

SOME FACTS AND CORRECTIONS REGARDING THE DIAMOND REGION OF ARKANSAS. By J. C. Branner. E. & M. J., vol. 87, p. 371. 4 columns.

PRODUCTION OF DIAMONDS FROM THE ARKANSAS FIELD. E. & M. J., vol. 87, p. 155. 1½ columns.

THE ARKANSAS DIAMOND FIELDS. By O. Q. Millar. Min. & Sci. Press, vol. 99, p. 534. 1½ columns.

THE ARKANSAS DIAMOND FIELDS IN 1909. By J. F. Fuller. E. & M. J., vol. 89, p. 767. 4 columns. I.

DIAMOND MINES OF ARKANSAS. By J. L. Cowan. Min. & Sci. Press, vol. 101, p. 178. 4 columns. I.

DIAMONDS IN ARKANSAS. By G. F. Kunz and H. S. Washington. T. A. I. M. E., vol. 39, p. 169. 7 pages.

DIAMOND MINE IN PIKE COUNTY, ARKANSAS. By J. T. Fuller. E. & M. J., vol. 87, p. 152. 10½ columns. I.

DEVELOPED PHOSPHATE DEPOSITS OF NORTHERN ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 315, p. 463. 11 pages. 1906.

THE SLATES OF ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 430, p. 317. 18 pages. I. 1909.

ZINC AND LEAD IN ARKANSAS. By L. L. Wittich. M. & M., vol. 31, p. 10. 3 columns. Map.

Asia

PRINCIPAL MINES IN ASIA. Min. & Sci. Press, vol. 96, p. 161. 1½ columns. Table.

A JOURNEY TO CENTRAL ASIA. By A. Adiassewich. T. I. M. & M., vol. 17, p. 498. 28 pages.

MERCURY MINES AT KONIAH, ASIA MINOR. By F. F. Sharpless. E. & M. J., vol. 86, p. 602. 7½ columns. I.

Australia

THE MINING INDUSTRY IN QUEENSLAND, AUSTRALIA. By G. W. Williams. E. & M. J., vol. 87, p. 603. 11½ columns. I.

MINING IN AUSTRALIA. By W. J. Loring. Min. & Sci. Press, vol. 95, p. 501. 4 columns. Maps.

MINING IN AUSTRALIA. By H. L. Wilkinson. Min. & Sci. Press, vol. 95, p. 616. 5 columns.

THE LEADING MINES OF AUSTRALIA. Min. & Sci. Press, vol. 96, p. 11. 1 column. Table.

THE MINING WEALTH OF VICTORIA. By J. Stirling. T. A. I. M. E., vol. 2, p. 7. 19 pages.

FROM CAPE HOWE TO THE MURRAY ON THE VICTORIAN BORDER LINE: Exploration. By S. Hunter. T. A. I. M. E., vol. 5, p. 92. 4 pages.

MINING IN AUSTRALASIA IN 1908. By F. S. Mance. E. & M. J., vol. 86, p. 143. 5½ columns.

MINING OUTLOOK IN WESTERN AUSTRALIA. By A. Montgomery. Min. & Sci. Press, vol. 101, p. 840. 5 columns.

THE BLACK RANGE DISTRICT OF WESTERN AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 88, p. 715. 9 columns. I.

MINING IN WESTERN AUSTRALIA. By A. Montgomery. Min. Mag., London, vol. 3, p. 431. 10 columns. Map.

PROGRESS OF MINING IN WESTERN AUSTRALIA. By R. Hamilton. T. A. I. M. E., vol. 13, p. 7. 18½ pages. I.

SOME GEOLOGICAL CONSIDERATIONS AFFECTING WESTERN AUSTRALIAN ORE-DEPOSITS. By A. Montgomery. T. A. I. M. E., vol. 13, p. 160. 32 pages. I.

- REMARKS ON THE BROWN COAL BEDS AND ASSOCIATED DEPOSITS OF THE WERRIBEE PLAINS, VICTORIA. By A. E. Kitson. T. Au. I. M. E., vol. 8, pt. 2, p. 255. 12 pages.
- NOTES ON VICTORIAN BROWN COAL BEDS. By J. Stirling. T. Au. I. M. E., vol. 1, p. 35. 21½ pages. I.
- THE MOUNT LYELL MINING FIELD. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 29. 169 pages.
- THE ORE DEPOSITS OF MOUNT LYELL, COPPER DEPOSITS. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 113. 34 pages. I.
- NOTES ON MOUNT READ AND ITS SULPHIDE ORE BODIES. By L. Williams. T. Au. I. M. E., vol. 8, pt. 1, p. 74. 6 pages.
- COPPER MINES IN CHILLAGOE DISTRICT, QUEENSLAND. By G. W. Williams. E. & M. J., vol. 87, p. 1125. 6 columns. I.
- THE MANY PEAKS COPPER MINE, QUEENSLAND, AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 88, p. 872. 7½ columns. I.
- THE CLONCURRY COPPER DISTRICT, QUEENSLAND. By G. W. Williams. E. & M. J., vol. 88, p. 155. 13½ columns. I.
- COBAR GOLD AND COPPER FIELD, NEW SOUTH WALES. By G. W. Williams. E. & M. J., vol. 86, p. 957. 4 columns. I.
- SPECULATION ON THE ORIGIN AND FORMATION OF THE DIAMOND, WITH ESPECIAL REFERENCE TO ITS FORMATION AND POSITION AT BINGARA, NEW SOUTH WALES. By T. Mercer. T. Au. I. M. E., vol. 3, p. 56. 14½ pages.
- DOES AN AUSTRALIAN KIMBERLEY EXIST? By J. Plummer. Min. & Sci. Press, vol. 99, p. 93. 2½ columns.
- GEMS IN NEW SOUTH WALES AND QUEENSLAND. By F. S. Mance. E. & M. J., vol. 86, p. 115. ½ column.
- THE MOUNT MORGAN GOLD AND COPPER MINE. By G. W. Williams. E. & M. J., vol. 87, p. 635. 12½ columns. I.
- OCCURRENCE OF ORE IN MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 747. 1 column.
- THE MOUNT MORGAN MINE, CENTRAL QUEENSLAND. By J. B. Wilson. E. & M. J., vol. 87, p. 746. 19 columns. I.
- NATURE OF THE MOUNT MORGAN ORE DEPOSITS. E. & M. J., vol. 87, p. 635. 1½ columns.
- THE MT. MORGAN MINE. By O. M. Colvocoresses. M. & M., vol. 29, p. 3. 4½ columns. I.
- THE MOUNT MORGAN MINE. Min. & Sci. Press, vol. 95, p. 524. 3 columns. I.
- TELLURIUM IN THE ORES OF THE HAURAKI GOLDFIELDS, NEW ZEALAND. By F. B. Allen. T. Au. I. M. E., vol. 7, p. 94. 4 pages.
- THE SYNCLINAL OR "INVERTED SADDLE" REEFS OF THE BENDIGO GOLDFIELD. By W. H. Cundy. T. Au. I. M. E., vol. 8, pt. 2, p. 278. 10 pages. I.
- NOTES ON THE LEFROY GOLDFIELDS. By L. Jolly. T. Au. I. M. E., vol. 4, p. 132. 6 pages.
- MINING ON PRIVATE PROPERTY ON THE GOLDFIELDS OF WESTERN AUSTRALIA. By E. Lidgley. T. Au. I. M. E., vol. 8, pt. 1, p. 1. 10 pages. I.
- THE GOLD FIELDS OF VICTORIA. Min. & Sci. Press, vol. 20, p. 120, 1 column; p. 130, 1½ columns; p. 234, 2 columns; p. 266, 1 column.
- NOTES ON THE GEOLOGY, QUARTZ REEFS AND MINERALS OF THE WAIHI GOLDFIELD, NEW SOUTH WALES, AUSTRALIA. By P. C. Morgan. T. Au. I. M. E., vol. 8, pt. 2, p. 164. 23½ pages. I.
- GOLD IN SALT LAKES IN WESTERN AUSTRALIA. T. Au. I. M. E., vol. 8, pt. 1, p. 32. 1 page.
- NOTES ON THE AURIFEROUS DEVONIAN FORMATIONS OF GIPPSLAND, VICTORIA. By H. Herman. T. Au. I.

- M. E., vol. 5, p. 157. 12 pages. Maps.
- A FEW NOTES AND OBSERVATIONS ON THE REDUCTION AND ORE-DRESSING OF AURIFEROUS QUARTZ VEINSTONE IN VICTORIA. By H. Rosales. T. Au. I. M. E., vol. 5, p. 81. 12 pages. Tables.
- AURIFEROUS VEINS AT CHARTERS TOWERS, AUSTRALIA. By W. J. Paull. T. Au. I. M. E., vol. 3, p. 243. 6 pages.
- SOME GOLD-BEARING ROCKS AT BINGARA, NEW SOUTH WALES. By C. C. H. Mole. T. Au. I. M. E., vol. 2, p. 114. 2½ pages.
- PHYSIOGRAPHY AND GEOLOGY OF THE WADNAMINGA GOLDFIELDS, SOUTH AUSTRALIA. By F. D. Johnson. T. Au. I. M. E., vol. 2, p. 58. 10 pages. I.
- GOLD DEPOSITS OF COTHY, SOUTH WALES. By B. W. Holman. Min. Mag., vol. 4, p. 374. 8½ columns. I.
- LEADING PRODUCERS OF KALGOORLIE, WEST AUSTRALIA. By G. W. Williams. E. & M. J., vol. 85, p. 403. 3½ columns.
- IMPRESSIONS OF THE COUNTRY BETWEEN COOLGARDIE AND McDONNELL RANGES. By H. V. Smith. T. Au. I. M. E., vol. 8, pt. 1, p. 68. 4½ pages.
- THE DISCOVERY AND OCCURRENCE OF TELLURIDE OF GOLD UPON THE KALGOORLIE GOLDFIELDS, EAST COOLGARDIE DISTRICT, WESTERN AUSTRALIA. By A. G. Holroyd. T. Au. I. M. E., vol. 4, p. 186. 8 pages.
- ALLUVIAL DEPOSITS IN WESTERN AUSTRALIA. T. Au. I. M. E., vol. 13, p. 182. 2 pages.
- DEEP LEAD MINING IN AUSTRALIA. By D. H. Browne. Min. & Sci. Press, vol. 97, p. 565. 9½ columns. I.
- DEEP LEADS OF VICTORIA: The Cainozoic Buried Auriferous River Deposits. By H. L. Wilkinson. T. I. M. & M., vol. 17, p. 210. 58 pages. I.
- GOLD NUGGETS OF VICTORIA. T. Au. I. M. E., vol. 2, p. 23. 1 page.
- TWO IMPORTANT IRON ORE DEPOSITS OF AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 89, p. 724. 16½ columns. I.
- THE SILVER-LEAD-ZINC MINES AT BROKEN HILL, NEW SOUTH WALES. By G. W. Williams. E. & M. J., vol. 86, p. 793. 16½ columns. I.
- REMINISCENCES OF BROKEN HILL. By J. Warren. T. Au. I. M. E., vol. 9, p. 1. 23 pages. I.
- SOME NOTES ON THE WHITE CLIFFS OPAL FIELDS, WILCANNIA, NEW SOUTH WALES. By F. G. de v. Gipps. T. Au. I. M. E., vol. 2, p. 70. 6 pages; p. 76, 5 pages. I.
- THE AUSTRALIAN OIL SHALE INDUSTRY. E. & M. J., vol. 87, p. 1051. 1½ columns.
- OIL SHALE DEPOSITS, BLUE MOUNTAINS, NEW SOUTH WALES. By H. L. Jene. E. & M. J., vol. 90, p. 407. 4½ columns. D.
- THE CLARENDON PHOSPHATE DEPOSIT, NEAR DUNEDIN, NEW ZEALAND. By A. Andrew. T. Au. I. M. E., vol. 11, p. 177. 20 pages. I.
- RADIUM IN AUSTRALIA. By J. Plummer. Min. & Sci. Press, vol. 100, p. 292. 1½ columns.
- BROKEN HILL SILVER MINE. By E. C. Andrews. Min. & Sci. Press, vol. 98, p. 158. 2 columns.
- ORE DEPOSITS OF THE PEAKS SILVER FIELD, NEW SOUTH WALES. By C. O. G. Larcombe. T. Au. I. M. E., vol. 11, p. 128. 8 pages. I.
- TIN MINING AND MILLING IN NORTH QUEENSLAND. By G. W. Williams. E. & M. J., vol. 87, p. 1092. 6½ columns.
- THE NORTH DUNDAS TIN DISTRICT. By J. M. Bell. Min. Mag., vol. 4, p. 59. 4 columns. Map.

Austria-Hungary

PRODUCT OF THE MINES, SMELTING FURNACES AND SALT WORKS IN THE AUSTRIAN EMPIRE. Min. Mag., vol. 3, p. 141. 20 pages.

NAGYBANYA, HUNGARY. By E. Skewes. Min. & Sci. Press, vol. 96, p. 66. 7½ columns. I.

THE BOICZA GOLD MINES IN HUNGARY. By N. B. Knox. Min. & Sci. Press, vol. 100, p. 31. 8 columns. I.

THE VERESPATAK-ABRUDBANYA (Gold) DISTRICT, HUNGARY. By G. Slujka. E. & M. J., vol. 85, p. 154. 1½ columns.

THE GOLD ALLUVIALS OF THE RIVER DRAU IN HUNGARY. By A. von Gernet. T. I. M. & M., vol. 17, p. 439. 4 pages.

Belgium

MINING OPERATIONS IN THE PROVINCE OF HAINAUT, BELGIUM. Min. Mag., vol. 3, p. 255. 4 pages.

PHOSPHATE MINING IN BELGIUM. T. I. M. E., vol. 37, p. 683. 2½ pages.

THE ZINC ORES OF LA MALLIENE (Belgium). By H. De Pauw. T. I. M. E., vol. 37, p. 651. 1½ pages.

Bolivia

TIN MINING IN BOLIVIA. By W. R. Rumbold. Min. Mag., London, vol. 2, p. 451. 6 columns. I.

TIN MINING IN BOLIVIA. By W. Gray and A. L. Halden. Min. Mag., London, vol. 3, p. 203. 6 columns. I.

BEDDED COPPER DEPOSITS OF CARANGAS, BOLIVIA. By R. Hawxhurst, Jr. E. & M. J., vol. 90, p. 909. 12½ columns. I.

PROSPECTING FOR "BLACK DIAMONDS." By A. S. Atkinson. M. & M., vol. 30, p. 644. 2½ columns.

THROUGH THE BOLIVIAN HIGHLANDS. By E. P. Mathewson. Min. & Sci. Press, vol. 97, p. 227, 4 columns; p. 263, 8½ columns, I.

GOLD DEPOSITS IN BOLIVIA. M. & M., vol. 30, p. 379. 1 column. Map.

SUCHEZ DE BOLIVIA HYDRAULIC MINE. By W. E. G. Firebrace. Min. & Sci. Press, vol. 98, p. 287. 3 columns. I.

THE CHOROLQUE TIN DISTRICT, BOLIVIA. Min. Mag., vol. 4, p. 213. 4 columns. I.

Brazil

IRON ORE DEPOSITS OF BRAZIL. By O. A. Derby. E. & M. J., vol. 88, p. 1258. 3½ columns.

MINERAL RESOURCES OF THE BAHIA HIGHLANDS, BRAZIL. E. & M. J., vol. 87, p. 1029. 12½ columns. I.

BRAZILIAN DIAMONDS. Min. & Sci. Press, vol. 95, p. 24. 1 column.

OCCURRENCE OF THE DIAMONDS OF BAHIA, BRAZIL. E. & M. J., vol. 87, p. 984. 5 columns. I.

THE DIAMOND BEARING HIGHLANDS OF BAHIA, BRAZIL. By J. C. Branner. E. & M. J., vol. 87, p. 981, 17½ columns, I.; p. 1029, 12½ columns, I.

BRAZILIAN DIAMOND MINING. E. & M. J., vol. 85, p. 442. 1 column.

THE DIAMANTINA DISTRICT OF MINAS GERÆS. By G. W. Lindsay. E. & M. J., vol. 87, p. 856. 2 columns.

MINING FOR GEMS IN BRAZIL. By A. S. Atkinson. E. & M. J., vol. 87, p. 1234. 5 columns.

AURIFEROUS ALLUVIALS OF THE UPPER AMAZON VALLEY. By Sir W. M. Conway. E. & M. J., vol. 87, p. 496. 2 columns.

BRAZIL'S IRON-ORE DEPOSITS. By G. E. Anderson. M. & M., vol. 31, p. 7. 5 columns.

MANGANESE DEPOSITS OF MORRO DA MINA, BRAZIL. By J. Lustosa and J. C. Branner. E. & M. J., vol. 86, p. 1196. 5½ columns. I.

THE THORIUM NITRATE INDUSTRY. M. & M., vol. 30, p. 768. 1½ columns.

British Columbia

BRITISH COLUMBIA MINES AND MINERALS. By E. Jacobs. E. & M. J., vol. 90, p. 257. 4½ columns.

THE COAST DISTRICT OF BRITISH COLUMBIA. E. & M. J., vol. 87, p. 888. 4½ columns.

MINING IN BRITISH COLUMBIA IN 1908. By E. Jacobs. M. & M., vol. 29, p. 327. 3 columns.

BRITISH COLUMBIA MINING, 1909. Min. & Sci. Press, vol. 101, p. 149. 3½ columns.

NOTES ON MOTHER LODE IN BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 88, p. 1101. 7 columns. I.

MINING IN BRITISH COLUMBIA IN 1909. By E. Jacobs. M. & M., vol. 30, p. 407. 2 columns.

THE MINERAL RESOURCES OF THE QUEEN CHARLOTTE ISLAND, BRITISH COLUMBIA. By J. McLellan. J. C. M. I., vol. 13, p. 288. 8 pages. I. Map.

OBSERVATIONS ON THE GEOLOGY AND ORE DEPOSITS OF CAMP HEDDLEY, BRITISH COLUMBIA. By C. Cam-sell. J. C. M. I., vol. 11, p. 423. 10 pages. Maps.

A PARTIAL BIBLIOGRAPHY OF PUBLICATIONS REFERRING TO THE GEOLOGY AND MINERAL INDUSTRY OF ALBERTA, BRITISH COLUMBIA AND THE YUKON. By J. C. Gwillim. J. C. M. I., vol. 11, p. 433. 11½ pages.

THE "WHITE BEAR MINE," ROSSLAND, BRITISH COLUMBIA. By H. H. Yuill. J. C. M. I., vol. 11, p. 525. 16 pages. I.

THE GEOLOGY AND ORE DEPOSITS OF FRANKLIN CAMP, BRITISH COLUMBIA. By R. W. Brock. J. C. M. I., vol. 10, p. 170. 10 pages. I.

NEW COALFIELD IN BRITISH COLUMBIA. E. & M. J., vol. 85, p. 544. ¼ column.

THE HOSMER MINES, LTD., BRITISH COLUMBIA: Coal. By H. H. Yuill. J. C. M. I., vol. 13, p. 230. 27 pages. I. Maps.

THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA. By M. Roberts. T. A. I. M. E., vol. 40, p. 798. 6 pages. I.

THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA. By M. Roberts. T. A. I. M. E., vol. 40, p. 798. 6 pages. I.

THE CLASSIFICATION OF NICOLA VALLEY COALS, BRITISH COLUMBIA. By S. J. Castleman. J. C. M. I., vol. 13, p. 600. 3 pages.

THE NORTHERN CASCADES: Mining Along the International Boundary. By H. F. Evans. Min. & Sci. Press, vol. 100, p. 448. 4 columns. I.

NOTES ON THE TYRE COPPER MINE. By W. H. Weed. E. & M. J., vol. 85, p. 199. 6½ columns. I.

FURTHER OBSERVATIONS RELATIVE TO THE OCCURRENCE OF DEPOSITS OF COPPER ORE ON THE NORTH PACIFIC AND ADJACENT ISLANDS FROM THE SOUTHERN BOUNDARY OF BRITISH COLUMBIA TO THE ALASKAN PENINSULA. By W. M. Brewer. J. C. M. I., vol. 10, p. 195. 14 pages.

MINES OF THE GRANBY CONSOLIDATED, PHOENIX, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 88, p. 1260. 7 columns. I.

THE CENTRE STAR GROUP OF MINES, ROSSLAND, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 89, p. 17. 8½ columns. I.

LE ROI MINE AT ROSSLAND, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 89, p. 220. 4 columns. I.

BEAR RIVER DISTRICT, BRITISH COLUMBIA. By W. W. Rush. Min. & Sci. Press, vol. 99, p. 152. 2 columns. Map.

THE PORTLAND CANAL MINING DISTRICT, BRITISH COLUMBIA. E. & M. J., vol. 90, p. 451. 3 columns. I.

- MAGNETITE DEPOSITS OF TEXADA AND VANCOUVER ISLANDS.** By E. Lindeman. J. C. M. I., vol. 13, p. 107. 15½ pages. Maps.
- THE EMMA MINE, BOUNDARY DISTRICT BRITISH COLUMBIA.** By F. Keffer. J. C. M. I., vol. 10, p. 188. 6½ pages. I. Map.
- OCCURRENCE OF MAGNETITE IN THE EMMA MINE, BRITISH COLUMBIA.** J. C. M. I., vol. 10, p. 188. 6 pages. I.
- ST. EUGENE MINE AND MILL, EAST KOOTENAY, BRITISH COLUMBIA.** By E. Jacobs. E. & M. J., vol. 89, p. 420. 7 columns. I.
- OCCURRENCE OF LEAD-SILVER ORE AT KOOTENAY, BRITISH COLUMBIA, EUGENE MINE.** E. & M. J., vol. 89, p. 420. 1½ columns. I.
- OCCURRENCE OF SILVER-LEAD ORES AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA.** E. & M. J., vol. 89, p. 420. 1½ columns. I.
- PLATINUM DEPOSITS IN BRITISH COLUMBIA.** J. C. M. I., vol. 13, p. 317. 2½ pages.
- PLATINUM MINING IN THE TULAMEEN DISTRICT, BRITISH COLUMBIA.** By C. Camsell. J. C. M. I., vol. 13, p. 309. 15 pages. I. Map.
- See also MISCELLANEOUS PRODUCTION.
- California**
- THE NEW SAN FRANCISCO.** By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 554. 2 columns. I.
- BORAX IN CALIFORNIA.** Min. & Sci. Press, vol. 101, p. 400. 1½ columns.
- BORATE DEPOSITS OF CALIFORNIA.** By W. B. Wainwright. T. I. M. E., vol. 37, p. 156. 6 pages.
- COAL MINING IN CALIFORNIA.** Min. & Sci. Press, vol. 95, p. 186. ¼ column.
- COAL IN THE MOUNT DIABLO RANGE, MONTEREY COUNTY, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 285, p. 223. 2 pages. I. 1905.
- COAL OF STONE CANYON, MONTEREY COUNTY, CALIFORNIA.** By M. R. Campbell. U. S. G. S., Bull. 316, p. 435. 4 pages. 1906.
- THE OCCURRENCE OF COPPER IN SHASTA COUNTY, CALIFORNIA.** By L. C. Groton. U. S. G. S., Bull. 430, p. 71. 40½ pages. I. 1909.
- THE BALAKLALA CONSOLIDATED COPPER COMPANY, CALIFORNIA.** E. & M. J., vol. 87, p. 501. 9 columns. I.
- PRIMARY CHALCOCITE IN CALIFORNIA.** By O. H. Hershey. Min. & Sci. Press, vol. 96, p. 429. 3 columns.
- THE GENESIS OF THE COPPER ORE IN SHASTA COUNTY, WEST OF THE SACRAMENTO RIVER.** By W. Forestner. Min. & Sci. Press, vol. 97, p. 261. 3 columns.
- COPPER MINES AND SMELTERIES OF SHASTA COUNTY, CALIFORNIA.** By G. A. Packard. E. & M. J., vol. 88, p. 393. 20½ columns. I.
- DIAMONDS IN CALIFORNIA.** By H. G. Hauks. Min. & Sci. Press, vol. 20, p. 162; 2½ columns; p. 194, 1 column; vol. 22, p. 140, ½ column.
- DIATOMACEOUS DEPOSITS OF NORTHERN SANTA BARBARA COUNTY, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 315, p. 438. 10 pages. 1906.
- CALIFORNIA GOLD MINING.** Min. & Sci. Press, vol. 100, p. 17, 3 columns. I.
- MINERAL PROSPECTS AROUND DEATH VALLEY.** By R. E. Rinehart. Min. & Sci. Press, vol. 97, p. 297. 4½ columns. I.
- MINERAL DISTRICT OF CENTRAL CALIFORNIA.** By J. B. Trask. Min. Mag., vol. 3, p. 121, 15 pages; p. 239, 12 pages.
- MINES AND MINING IN CALIFORNIA: Placer Mining.** Min. Mag., vol. 5, p. 193. 23 pages.
- QUARTZ MINING OPERATIONS IN CALIFORNIA.** Min. Mag., vol. 1, p. 144. 5½ pages.

- EXPERIENCE OF THE GOLD MINES OF CALIFORNIA.** *Min. Mag.*, vol. 8, p. 28, 12 pages; p. 129, 8½ pages; p. 222, 6 pages; p. 477, 10 pages.
- THE NEW GOLD FIELD IN SAN DIEGO COUNTY, CALIFORNIA.** *Min. & Sci. Press*, vol. 20, p. 200. 1 column.
- MINING ON THE MOTHER LODE IN AMADOR COUNTY, CALIFORNIA.** By W. H. Storms. *Min. & Sci. Press*, vol. 100, p. 897. 6 columns.
- THE EXPOSED TREASURE LODE, MOJAVE, CALIFORNIA.** By C. De Kalb. *T. A. I. M. E.*, vol. 38, p. 310. 10 pages. I.
- THE STANDARD MINE, BODIE, CALIFORNIA.** By R. G. Brown. *T. A. I. M. E.*, vol. 38, p. 343. 15 pages. I.
- OBSERVATIONS ON THE EXTENT OF THE GOLD REGION OF CALIFORNIA AND OREGON.** By W. P. Blake. *Min. Mag.*, vol. 5, p. 32. 14 pages.
- HART — A NEW CALIFORNIA GOLD CAMP.** *E. & M. J.*, vol. 85, p. 308. ½ column.
- GOLD PARK DISTRICT, CALIFORNIA.** *E. & M. J.*, vol. 90, p. 600. 2 columns. I.
- BLACK DIAMOND, CALIFORNIA.** By O. H. Hershey. *Min. & Sci. Press*, vol. 98, p. 147. 1½ columns.
- GOLD MINING IN RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. *Min. & Sci. Press*, vol. 101, p. 508, 4 columns; p. 533, 8 columns, I.
- GOLD MINING IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. *U. S. G. S.*, Bull. 430, p. 23. 24 pages. 1909.
- HOAG DISTRICT, CALIFORNIA.** By N. C. Stines. *Min. & Sci. Press*, vol. 100, p. 384. 5½ columns. I.
- KEYSTONE CONSOLIDATED MINE AND ITS EARLY HISTORY.** By W. H. Storms. *Min. & Sci. Press*, vol. 100, p. 755. 4 columns. I.
- MINING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Wolcott. *E. & M. J.*, vol. 87, p. 396. 6½ columns. I.
- MINING AT ALLEGHANY, CALIFORNIA.** By F. L. Lowell. *Min. & Sci. Press*, vol. 100, p. 132. 3 columns. I.
- SOME ORE DEPOSITS IN THE INTO RANGE, CALIFORNIA.** By J. A. Reid. *Min. & Sci. Press*, vol. 95, p. 80. 4½ columns. I.
- GOLD MINES NEAR THE CALAVERAS BIG TREES.** *Min. & Sci. Press*, vol. 22, p. 361. 1 column.
- THE WEAVERVILLE-TRINITY CENTER GOLD GRAVELS, TRINITY COUNTY, CALIFORNIA.** By D. F. MacDonald. *U. S. G. S.*, Bull. 430, p. 48. 11 pages. I. 1909.
- SANTA CLARA RIVER PLACERS.** By C. E. Jamison. *Min. & Sci. Press*, vol. 100, p. 360. 2½ columns.
- LA GRANGE HYDRAULIC MINE, CALIFORNIA.** By D. F. Campbell. *Min. & Sci. Press*, vol. 97, p. 491. 6 columns. I.
- CALIFORNIA GOLD NUGGETS.** *Min. & Sci. Press*, vol. 20, p. 178. ½ column.
- THE GYPSUM DEPOSITS OF THE PALEN MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA.** By E. C. Harder. *U. S. G. S.*, Bull. 430, p. 407. 10 pages. I. 1909.
- GYPSUM DEPOSITS NEAR CANE SPRINGS, KERN COUNTY, CALIFORNIA.** By F. L. Hess. *U. S. G. S.*, Bull. 430, p. 417. 2 pages. 1909.
- A RECONNAISSANCE OF THE GYPSUM DEPOSITS OF CALIFORNIA.** By F. L. Hess. *U. S. G. S.*, Bull. 413. 37 pages. I. 1910.
- AN IRON DEPOSIT IN THE CALIFORNIA DESERT REGION.** By C. C. Jones. *E. & M. J.*, vol. 87, p. 785. 10 columns. I.
- IRON ORES OF CALIFORNIA.** By H. C. Harder. *Min. & Sci. Press*, vol. 101, p. 79. 3½ columns. Maps.
- OCCURRENCE OF AN IRON ORE DEPOSIT IN THE CALIFORNIA DESERT REGION.** *E. & M. J.*, vol. 87, p. 785. 10 columns. I.

- SOME IRON ORES OF WESTERN AND CENTRAL CALIFORNIA.** By E. C. Hader. U. S. G. S., Bull. 430, p. 219. 8½ pages. 1909.
- THE IRON AGE IRON-ORE DEPOSIT, NEAR DALE, SAN BERNARDINO COUNTY, CALIFORNIA.** By E. C. Harder and J. L. Rich. U. S. G. S., Bull. 430, p. 228. 12 pages. I. 1909.
- IRON ORES OF THE SOUTHWEST.** By C. C. Jones. M. & M., vol. 31, p. 574. 4½ columns.
- CHROME ORE IN CALIFORNIA.** By C. G. Yale. E. & M. J., vol. 85, p. 101. ¾ column.
- SOME CHROMITE DEPOSITS IN WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 167. 16½ pages. I. 1909.
- CALIFORNIA MINERALS.** By A. S. Eakle. Min. & Sci. Press, vol. 96, p. 98. 2½ columns.
- MAGNESITE DEPOSITS OF CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 355. 67 pages. I. 1908.
- MAGNESITE IN CALIFORNIA.** E. & M. J., vol. 87, p. 292. ½ column.
- SOME MAGNESITE DEPOSITS OF CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 285, p. 385. 8 pages. 1905.
- NITRATE DEPOSITS OF SOUTHERN CALIFORNIA.** By F. W. Graeff. E. & M. J., vol. 90, p. 173. 2½ columns.
- OIL RESOURCES OF CALIFORNIA.** By M. L. Requa. Min. Mag., vol. 4, p. 47. 10½ columns. Map.
- OIL INDUSTRY IN CALIFORNIA IN 1909.** Min. & Sci. Press, vol. 100, p. 97. 5 columns. I.
- PETROLEUM DEVELOPMENT IN SAN JOAQUIN VALLEY.** E. & M. J., vol. 89, p. 964. 7 columns.
- THE CALIFORNIA OIL INDUSTRY.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 857. 5½ columns.
- GEOLOGY OF THE COALINGA DISTRICT, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.
- PRELIMINARY REPORT ON THE COALINGA OIL DISTRICT IN FRESNO AND KINGS COUNTIES, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 357. 142 pages. I. 1908.
- OIL MEASURES IN THE COALINGA DISTRICT, CALIFORNIA.** By W. Forstner. Min. & Sci. Press, vol. 98, p. 386. 3½ columns.
- GEOLOGY AND OIL RESOURCES OF THE SANTA MARIA OIL DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 322. 161 pages. I. 1907.
- GEOLOGY AND OIL RESOURCES OF THE CUMBERLAND DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 321. 91 pages. I. 1907.
- PRELIMINARY REPORT ON McKITTRICK — SUNSET OIL REGION, CALIFORNIA.** By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 406. 225 pages. I. 1910.
- THE SALT LAKE OIL FIELD NEAR LOS ANGELES, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 285, p. 357. 5 pages. I. 1905.
- THE MINER RANCH OIL FIELD, CONTRA COSTA COUNTY, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 340, p. 339. 4 pages. 1907.
- LAKE VIEW GUSHER: A Large Oil Well in Midway Field, California.** Min. & Sci. Press, vol. 100, p. 925. 2 columns. I.
- THE LOS ANGELES OIL INDUSTRY.** By P. E. Barbour. E. & M. J., vol. 88, p. 365. 5 columns.
- QUICKSILVER IN CALIFORNIA.** Min. & Sci. Press, vol. 100, p. 15. 3½ columns. Map.
- MERCURY MINES OF NEW ALMADEN, CALIFORNIA.** Min. Mag., vol. 10, p. 142. 2½ pages.
- SODIUM SULPHATE IN SODA LAKE, CARRISO PLAIN, SAN LUIS OBISPO COUNTY, CALIFORNIA.** By R.

- Arnold and H. R. Johnson. U. S. G. S., Bull. 380, p. 369. 3 pages. 1908.
- SODIUM SULPHATE IN SAN LUIS OBISPO COUNTY, CALIFORNIA. By R. Arnold and H. R. Johnson. Min. & Sci. Press, vol. 99, p. 855. 1½ columns.
- TRIPOLI DEPOSITS OF CALIFORNIA. Min. & Sci. Press, vol. 95, p. 54. ½ column.
- TOURMALINE IN CALIFORNIA. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 864. 4 columns.
- OCCURRENCE OF TUNGSTEN IN RAND DISTRICT, CALIFORNIA. By S. A. Dolbear. E. & M. J., vol. 90, p. 904. 4½ columns.
- TUNGSTEN MINING IN CALIFORNIA. E. & M. J., vol. 86, p. 573. 2 columns. I.
- See also MISCELLANEOUS PRODUCTION.
- Canada**
- NOTES ON EARLY MINING ENDEAVOUR IN ONTARIO. By E. L. Fralick. J. C. M. I., vol. 11, p. 151. 4½ pages.
- ORE DEPOSITS IN WESTERN ONTARIO. E. & M. J., vol. 90, p. 325. 3 columns.
- A VISIT TO THE MINERAL DISTRICT OF CANADA. By W. Frecheville and H. F. Marriott. T. I. M. & M., vol. 18, p. 158. 21 pages. I. Map.
- CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA, LTD. E. & M. J., vol. 85, p. 557. 7½ columns. I.
- NEW DISCOVERIES IN NORTHERN QUEBEC. By J. Obalski. J. C. M. I., vol. 10, p. 103. 3 pages.
- MINERALS AND ORES OF NORTHERN CANADA. By J. B. Tyrrell. J. C. M. I., vol. 11, p. 347. 18 pages. I.
- NOTES ON RECENT DEVELOPMENTS IN ASBESTOS MINING IN QUEBEC. By W. J. Woolsey. J. C. M. I., vol. 13, p. 408. 6 pages. I.
- ON THE DISTRIBUTION OF ASBESTOS DEPOSITS IN THE EASTERN TOWNSHIPS OF QUEBEC. By J. A. Dresser. J. C. M. I., vol. 13, p. 414. 26 pages. I.
- ASBESTOS IN QUEBEC. By F. Cirkel. E. & M. J., vol. 86, p. 461. 1 column.
- THE QUARRIES OF THE CANADIAN ASBESTOS DISTRICT. By F. Cirkel. E. & M. J., vol. 89, p. 918. 6½ columns. I.
- THE TAR-SANDS OF THE ATHABASCA RIVER, CANADA. By Robt. Bell. T. A. I. M. E., vol. 38, p. 836. 12 pages. I.
- THE COALFIELDS OF CANADA. By P. Thompson. E. & M. J., vol. 88, p. 1271. 2 columns.
- COAL AREAS IN THE CANADIAN NORTHWEST. E. & M. J., vol. 90, p. 548. 4 columns.
- MINING AT LITHBRIDGE, ALBERTA. By A. T. Shurick. M. & M., vol. 31, p. 635. 2 columns. I.
- THE COALFIELDS OF ALBERTA AND SASKATCHEWAN. By B. Thompson. E. & M. J., vol. 88, p. 17. 3½ columns.
- THE COALS AND COAL FIELDS OF ALBERTA, SASKATCHEWAN AND MANITOBA. By D. B. Dowling. J. C. M. I., vol. 10, p. 227. 13 pages. I. Map.
- THE GALT COAL FIELD, ALBERTA, CANADA. By W. D. L. Hardie. J. C. M. I., vol. 13, p. 190. 5½ pages. D.
- THE CREIGHTON MINE OF THE CANADIAN COPPER COMPANY, SUDBURY DISTRICT, ONTARIO. By L. Stewart. J. C. M. I., vol. 11, p. 567. 19 pages. I.
- GOLD AREAS IN THE CANADIAN NORTHWEST. E. & M. J., vol. 90, p. 548. 4 columns.
- GOLD IN THE EASTERN TOWNSHIPS OF THE PROVINCE OF QUEBEC. By J. Obalski. J. C. M. I., vol. 11, p. 251. 6 pages. I. Map.
- THE LARDER LAKE DISTRICT, ONTARIO. E. & M. J., vol. 85, p. 258. 2 columns.

- THE NICKEL PLATE MINE AND MILL.** Min. & Sci. Press, vol. 101, p. 271. 4 columns. I.
- RECENT MINING DEVELOPMENTS ON MT. SKEENA RIVER, CANADA.** By W. W. Leach. J. C. M. I., vol. 13, p. 357. 6 pages.
- THE OPASATIKA LAKE DISTRICT, PROVINCE OF QUEBEC.** By F. Cirkel. E. & M. J., vol. 87, p. 455. 3 columns. I.
- THE NEW GOLDFIELDS OF PORCUPINE, ONTARIO.** By R. E. Hore. E. & M. J., vol. 90, p. 1296. 3½ columns. I.
- THE PORCUPINE DISTRICT, ONTARIO.** By R. W. Brock. E. & M. J., vol. 90, p. 221. 3 columns.
- THE PORCUPINE GOLDFIELD.** By A. L. Simar. Min. Mag., London, vol. 3, p. 348. 6 columns. I.
- PORCUPINE, THE NEW GOLD REGION OF THE FAR NORTH.** Min. & Sci. Press, vol. 101, p. 705. 3½ columns.
- PORCUPINE DISTRICT OF ONTARIO.** By W. G. Miller. Min. & Sci. Press, vol. 101, p. 232. 2 columns. Map.
- PORCUPINE LAKE REGION, ONTARIO.** E. & M. J., vol. 89, p. 209. 3½ columns. Map.
- THE PORCUPINE GOLDFIELD.** By W. J. Loring. Min. Mag., vol. 4, p. 284. 8 columns. I.
- THE PORCUPINE GOLD FIELD.** By R. A. Meyer. M. & M., vol. 31, p. 701. 4½ columns. Map.
- A BRIEF DESCRIPTION OF THE GOWGANDA SILVER DISTRICT IN ONTARIO, CANADA.** By P. R. Iseman. Sch. Mines Quart., vol. 31, p. 172. 4½ pages. I.
- FIRST YEAR OF THE GOWGANDA DISTRICT, ONTARIO.** By G. M. Colvocoresses. E. & M. J., vol. 89, p. 1218. 9½ columns. I.
- THE GOWGANDA REGION IN ONTARIO.** E. & M. J., vol. 88, p. 60. 5 columns.
- IMPRESSIONS OF A NEW CAMP: GOWGANDA.** By H. E. West. E. & M. J., vol. 87, p. 900. 7 columns.
- NOTES ON THE RAINY RIVER DISTRICT, ONTARIO.** By W. L. Fleming. E. & M. J., vol. 88, p. 1064. 6½ columns. I.
- THE EASTERN CANADIAN MINERAL BELT.** By T. F. Van Wagenen. Min. & Sci. Press, vol. 101, p. 372. 5½ columns. Maps.
- MONTREAL RIVER DISTRICT, CANADA.** By W. H. Collins. Min. & Sci. Press, vol. 98, p. 895. 2 columns.
- CANADIAN GRAPHITE.** By H. P. H. Brumell. J. C. M. I., vol. 10, p. 83. 20 pages.
- MODES OF OCCURRENCE OF CANADIAN GRAPHITE.** By H. P. H. Brumell. J. C. M. I., vol. 11, p. 236. 14½ pages.
- CANADIAN GRAPHITE.** By H. M. Lamb. E. & M. J., vol. 85, p. 360. 5½ columns.
- THE IRON ORES OF ONTARIO.** By A. B. Willmott. J. C. M. I., vol. 11, p. 106. 18 pages.
- THE IRON ORES OF CANADA.** By C. K. Leith. J. C. M. I., vol. 11, p. 91. 16 pages.
- OCCURRENCES OF IRON ORES AT BRUCE MINES, ONTARIO.** J. C. M. I., vol. 10, p. 158. 2 pages. D.
- IRON MINING POSSIBILITIES IN THE PROVINCE OF QUEBEC.** By F. Cirkel. J. C. M. I., vol. 10, p. 108. 10 pages. D.
- IRON RANGES OF NORTHERN AND NORTHWESTERN ONTARIO.** E. & M. J., vol. 89, p. 360. 7 columns.
- THE MOOSE MOUNTAIN IRON RANGE, WITH SPECIAL REFERENCE TO THE PROPERTIES OF MOOSE MOUNTAIN LTD.** By N. L. Leach. J. C. M. I., vol. 11, p. 147. 4 pages.
- THE BRUCE MINES, ONTARIO, 1846-1906.** By H. J. Carnegie Williams. J. C. M. I., vol. 10, p. 147. 22 pages. I.

- THE HELEN MINE, MICHIPICOTEN, ONTARIO: Iron Ore.** By R. W. Seelye. J. C. M. I., vol. 13, p. 121. 14½ pages. I.
- CHROME ORE IN CANADA.** By P. Thompson. E. & M. J., vol. 88, p. 726. 2½ columns.
- CHROME IRON MINING AND MILLING IN CANADA.** By H. F. Strangways. E. & M. J., vol. 85, p. 595. 7 columns. I.
- THE MOOSE MOUNTAIN IRON RANGE, CANADA.** By J. J. Bell. E. & M. J., vol. 85, p. 805. 2½ columns. I.
- THE IRON RANGES EAST OF LAKE NIPIGON, ONTARIO.** By A. P. Coleman and E. S. Moore. E. & M. J., vol. 83, p. 445. 2 columns.
- CANADIAN IRON ORE INDUSTRY.** M. & M., vol. 31, p. 455. 6½ columns. I.
- MINING IRON UNDER THE SEA.** By H. W. Buker. M. & M., vol. 31, p. 569. 7 columns. I.
- THE MICA INDUSTRY IN CANADA.** By F. Cirkel. E. & M. J., vol. 85, p. 801. 3½ columns. I.
- THE TILBURY AND ROMNEY OIL-FIELDS IN ONTARIO.** E. & M. J., vol. 85, p. 363. 1 column.
- THE COMMERCIAL VALUE OF THE OIL-SHALES OF EASTERN CANADA, BASED ON THEIR CONTENTS BY ANALYSIS IN CRUDE OIL AND AMMONIUM SULPHATE.** By R. W. Ells. J. M. Soc. N. S., vol. 15, p. 29. 28 pages.
- THE NEW TILBURY AND ROMNEY OIL FIELDS OF KENT COUNTY, ONTARIO.** By E. Coste. J. C. M. I., vol. 10, p. 77. 8 pages.
- PEAT IN CANADA.** E. & M. J., vol. 88, p. 361. 2 columns.
- THE PEAT FUEL INDUSTRY OF CANADA.** E. & M. J., vol. 87, p. 905. 1 column.
- THE SILVER VEINS OF THE MONTREAL RIVER DISTRICT, CANADA.** By A. E. Barlow. Min. & Sci. Press, vol. 97, p. 462. 6½ columns.
- MINING AT COBALT.** By F. C. Loring. E. & M. J., vol. 85, p. 905. 4 columns.
- MINING AT COBALT.** By F. C. Loring. J. C. M. I., vol. 11, p. 335. 5 pages.
- OCCURRENCE OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO.** J. C. M. I., vol. 11, p. 275. 12 pages.
- THE COBALT MINING DISTRICT.** By R. Bell. J. C. M. I., vol. 10, p. 62. 10 pages.
- THE ORE DEPOSITS OF THE COBALT DISTRICT, ONTARIO, CANADA.** By C. R. Van Hise. J. C. M. I., vol. 10, p. 45. 16 pages.
- THE PROBABLE NUMBER OF PRODUCTIVE VEINS IN THE COBALT DISTRICT.** By G. R. Mickle. J. C. M. I., vol. 13, p. 325. 12 pages.
- THE PRESENT POSITION OF COBALT, CANADA.** By H. P. Davis. E. & M. J., vol. 86, p. 855. 5 columns. I.
- THE COBALT SILVER DISTRICT, ONTARIO, CANADA.** By W. B. Phillips. E. & M. J., vol. 86, p. 518. 2½ columns.
- COBALT, ONTARIO, CANADA.** By H. B. Smith. Min. & Sci. Press, vol. 96, p. 876. 5½ columns. I.
- COBALT, ONTARIO, CANADA.** By F. C. Loring. Min. & Sci. Press, vol. 95, p. 814. 2½ columns. I.
- OPERATIONS IN THE COBALT DISTRICT, ONTARIO.** By E. Higgins. E. & M. J., vol. 87, p. 1267. 14 columns. I.
- THE COBALT DISTRICT IN 1909.** By R. E. Hore. E. & M. J., vol. 89, p. 703. 4 columns. I.
- THE SOUTH LORRAINE SILVER DISTRICT, ONTARIO, CANADA.** By W. B. Phillips. E. & M. J., vol. 87, p. 214. 4 columns.
- THE SILVER ISLET VEIN, LAKE SUPERIOR.** By W. McDermott. T. I. M. & M., vol. 18, p. 220. 34½ pages.
- OCCURRENCE OF ORE IN SILVER ISLET MINE.** T. I. M. & M., vol. 18, p. 222. 4 pages.

THE TUNGSTEN ORES OF CANADA. E. & M. J., vol. 88, p. 729. 2½ columns.

TUNGSTEN AND THE MOOSE RIVER SCHEELITE VEINS. By A. A. Hayward. J. M. Soc. N. S., vol. 15, p. 65. 14 pages.

THE OCCURRENCES OF TUNGSTEN ORES IN CANADA. By T. L. Walker. J. C. M. I., vol. 11, p. 367. 4½ pages.

See also MISCELLANEOUS PRODUCTION.

The Carolinas

MINERAL RESOURCES OF SOUTH CAROLINA. Min. Mag., vol. 9, p. 1, 22 pages; p. 103, 16 pages; p. 355, 4 pages.

THE MINERALS OF NORTH CAROLINA. By F. A. Genth. U. S. G. S., Bull. 74. 119 pages. 1891.

MINOR MINERALS OF NORTH CAROLINA. By W. C. Kerr. U. S. G. S., Mineral Resources, 1882, vol. 17. 3 pages.

THE MINES OF SOUTH CAROLINA. By H. L. Scaife. E. & M. J., vol. 86, p. 1212. 4½ columns.

THE DAN RIVER COALFIELD IN NORTH CAROLINA. E. & M. J., vol. 89, p. 1239. 2 columns.

THE COAL LANDS OF THE DEEP RIVER COMPANY IN NORTH CAROLINA. By W. R. Johnson. Min. Mag., vol. 1, p. 352. 13 pages.

THE PROGRESS OF GOLD MINING IN NORTH CAROLINA. By E. W. Lyon. E. & M. J., vol. 87, p. 293. 13½ columns. I.

ORE-DEPOSITS OF THE EASTERN GOLD-BELT OF NORTH CAROLINA. By W. O. Crosby. T. A. I. M. E., vol. 38, p. 849. 9 pages.

NOTES ON THE GOLD REGIONS OF NORTH AND SOUTH CAROLINA. By O. P. Leeds. Min. Mag., vol. 2, p. 27. 6 pages; p. 357, 12 pages. I.

MICA DEPOSITS OF WESTERN NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 315, p. 400. 22 pages. I. 1906.

MICA DEPOSITS OF NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 430, p. 593. 48 pages. I. 1909.

MONAZITE AND MONAZITE MINING IN THE CAROLINAS. By J. H. Pratt and D. B. Sterrett. T. A. I. M. E., vol. 40, p. 313. 28 pages. I.

MONAZITE DEPOSITS OF THE CAROLINAS. By D. B. Sterrett. U. S. G. S., Bull. 340, p. 272. 14 pages. I. 1907.

TIN DEPOSITS OF THE CAROLINAS. By S. M. Ball. E. & M. J., vol. 87, p. 1130. 2½ columns.

Central America

MINING AND TRANSPORTATION IN GUATEMALA. By C. C. Sample. E. & M. J., vol. 85, p. 1194. 4½ columns.

MINES AND MILL OF MONTEZUMA MINES, COSTA RICA. By S. F. Shaw. E. & M. J., vol. 90, p. 715. 6 columns. I.

Chile

MINES AND MINING OPERATIONS IN CHILE, SOUTH AMERICA. Min. Mag., vol. 3, p. 29. 13 pages.

MINING AND METALLURGY IN CHILE. By F. A. Sundt. M. & M., vol. 30, p. 646. 4 columns. Map.

RECENT MINING WANDERINGS IN BURMA, CHILE, and BOLIVIA. By J. H. Curle. Min. & Sci. Press, vol. 96, p. 879. 7½ columns.

MINERALS OF CHILE, SOUTH AMERICA. By J. L. Smith. Min. Mag., vol. 5, p. 371. 11½ pages.

GEOLOGICAL FEATURES OF THE COAL-FIELDS OF CHILE. T. I. M. E., vol. 38, p. 34. 4 pages.

THE COAL-FIELDS AND COLLIERIES OF THE REPUBLIC OF CHILE. By A. Russell. T. I. M. E., vol. 38, p. 29. 54 pages. I.

THE CALAMA COPPER DISTRICT, CHILE.
By F. A. Smith. *M. & M.*, vol. 31,
p. 473. 4 columns. I.

THE BRADEN COPPER MINES, CHILE.
By W. Braden. *M. & M.*, vol. 30,
p. 506. 1½ columns.

THE COLLAHUASI COPPER DISTRICT,
CHILE. By R. Hawxhurst. *Min.*
Mag., London, vol. 3, p. 271. 14
columns. I.

THE PODEROSA COPPER MINE, COL-
LAHUASI, CHILE. By Robt. Hawx-
hurst, Jr. *E. & M. J.*, vol. 85, p. 490.
4 columns.

GOLD REGION OF THE STRAIT OF
MAGELLAN. By R. A. T. Penrose.
Min. & Sci. Press, vol. 98, p. 153.
3½ columns.

NITRATE OF SODA INDUSTRY OF CHILE.
By S. H. Loram. *Min. & Sci. Press*,
vol. 100, p. 125, 8 columns, I.; p.
180, 10 columns. I.

THE NITER INDUSTRY OF CHILE. *E.*
& *M. J.*, vol. 90, p. 19. 14½ col-
umns. I.

China

GEOLOGICAL AND MINING NOTES ON
CHINA. By A. Hassam. *T. I. M.*
E., vol. 36, p. 353. 12 pages.

MINERAL RESOURCES OF MANCHURIA.
By T. T. Read. *Min. Mag.*, Lon-
don, vol. 2, p. 121. 4½ columns. I.

NORTHERN MANCHURIA. By C. W.
Purinton. *Min. Mag.*, vol. 4, p. 53.
9½ columns. I.

COAL IN CHINA. *Min. & Sci. Press*,
vol. 20, p. 42. ½ column.

COAL MINING IN MANCHURIA. By T.
T. Read. *Min. Mag.*, London, vol.
1, p. 215. 8 columns. I.

THE FUSHUN COLLIERY, SOUTH MAN-
CHURIA. By W. A. Moller. *T. A.*
I. M. E., vol. 41, p. 241. 4 pages.

THE PINGHSIANG COLLIERY, CHINA.
By K. P. Swensen. *Min. & Sci.*
Press, vol. 101, p. 564. 7 columns. I.

COAL MINING IN CHINA. By T. T.
Read. *Min. & Sci. Press*, vol. 98,
p. 44. 5 columns. Map.

MINING IN NORTHERN CHINA. By F.
L. Cole. *Min. & Sci. Press*, vol. 98,
p. 584. 4½ columns. Map.

THE COAL-FIELDS BETWEEN SHAN
HAI KUAN AND MUKDEN, NORTH
CHINA. By W. A. Moller. *T. I.*
M. E., vol. 38, p. 460. 15 pages. I.

COAL MINING IN NORTH CHINA. *E. &*
M. J., vol. 85, p. 366. 2½ columns.

GOLD MINES OF TIBET. By A. Del
Mar. *Min. & Sci. Press*, vol. 100,
p. 254. 3½ columns.

IRON, STEEL AND FUEL IN CHINA. By
W. D. B. Dodson. *Min. & Sci.*
Press, vol. 97, p. 494. 2½ columns.

THE TAYEH IRON MINES, CHINA. By
A. J. Saltzer. *Min. & Sci. Press*,
vol. 100, p. 546. 5 columns. I.

LEAD MINES IN SHAN STATES, CHINA.
E. & M. J., vol. 88, p. 550. 16½
columns. I.

SILVER-LEAD MINES OF BAWDWIN,
SHAN STATES, CHINA. By T. D.
La Touche and J. C. Brown. *E. &*
& *M. J.*, vol. 88, p. 550. 16½ col-
umns. I.

TIN PRODUCTION IN THE PROVINCE OF
YUNNAN, CHINA. By W. F. Col-
lins. *T. I. M. & M.*, vol. 19, p. 187.
24 pages. I.

OCCURRENCE OF TIN IN THE PROVINCE
OF YUNNAN, CHINA. *T. I. M. &*
M., vol. 19, p. 188. ½ page.

See also MISCELLANEOUS PRODUCTION.

Colombia and The Gulanas

MINERAL RESOURCES OF THE SOUTH
OF COLOMBIA, SOUTH AMERICA. By
F. P. Gamba. *E. & M. J.*, vol. 88,
p. 312. 3½ columns.

ECONOMIC CONDITIONS IN COLOMBIA.
By F. L. Garrison. *Min. & Sci.*
Press, vol. 98, p. 550. 6 columns.
Map.

NOTES ON THE ALUMINUM INDUSTRY
IN FRANCE. By T. Callot. *E. & M.*
J., vol. 89, p. 1229. 3 columns. I.

- COAL DEPOSITS IN COLOMBIA. Min. & Sci. Press, vol. 98, p. 220. 1½ columns. I.
- THE FUTURE GOLD-OUTPUT OF COLOMBIA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- GOLD MINING IN COLOMBIA. By F. L. GARRISON. Min. & Sci. Press, vol. 98, p. 217. 12½ columns. I.
- PASTO GOLD DISTRICT, COLOMBIA. Min. & Sci. Press, vol. 100, p. 583. 2 columns. I.
- QUARTZ MINES IN COLOMBIA, SOUTH AMERICA. By F. F. Sharpless. Min. & Sci. Press, vol. 97, p. 422. 4½ columns. I.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. Mag., London, vol. 2, p. 369. 15½ columns. I.
- THE FUTURE GOLD-OUTPUT OF COLOMBIA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- ALLUVIAL GOLD DEPOSITS AND MINING IN COLOMBIA. By P. A. Alig. E. & M. J., vol. 90, p. 1098. 4 columns.
- COLOMBIAN GOLD PLACERS. T. A. I. M. E., vol. 39, p. 418. 1 page. Table.
- GEOLOGY OF THE PLATINUM DEPOSITS OF COLOMBIA. By J. C. Costello. Min. & Sci. Press, vol. 98, p. 826. 3½ columns. I.
- THE GOLD DEPOSITS OF FRENCH GUIANA. E. & M. J., vol. 87, p. 400. 2½ columns. I.
- THE GOLD-FIELDS OF FRENCH GUIANA AND THE NEW METHOD OF DREDGING. By A. F. J. Bordeaux. T. A. I. M. E., vol. 41, p. 567. 28 pages. I.
- GOLD-BEARING GRAVELS IN FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 575. 10 pages.
- Colorado**
- A GAZETTEER OF COLORADO. By H. Gannett. U. S. G. S., Bull. 291, 185 pages. 1906.
- THE HISTORICAL DEVELOPMENT OF COLORADO VIEWED FROM A GEOLOGICAL STANDPOINT. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 295. 4 columns. I.
- THE MINING AND SMELTING INDUSTRY OF COLORADO. By F. Guiterman. Min. & Sci. Press, vol. 101, p. 699. 3½ columns. I.
- NOTES ON THE ECONOMIC GEOLOGY OF SOUTHEASTERN GUNNISON COUNTY, COLORADO. By J. M. Hill. U. S. G. S., Bull. 380, p. 21. 20 pages. I. 1908.
- CLAY DEPOSITS OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler and J. H. Gardner. U. S. G. S., Bull. 315, p. 296. 6½ pages. 1906.
- PICTOU COAL FIELD LORE. M. & M., vol. 31, p. 179. ½ column.
- THE YAMPA COAL FIELD, ROUTT COUNTY, COLORADO. By N. M. Fenneman and H. S. Gale. U. S. G. S., Bull. 285, p. 226. 14 pages. I. 1905.
- THE SOUTH PARK COAL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 307. 10 pages. I. 1908.
- THE GRAND MESA COAL FIELD, COLORADO. By W. T. Lee. U. S. G. S., Bull. 341, p. 316. 17 pages. I. 1907.
- COAL FIELDS OF THE DANFORTH HILLS AND GRANDHOGBACK IN NORTH-WESTERN COLORADO. By H. S. Gale. U. S. G. S., Bull. 316, p. 264. 40 pages. I. 1906.
- THE TRINIDAD COAL-FIELD, COLORADO. By G. B. Richardson. U. S. G. S., Bull. 381, p. 379. 68 pages. I. 1908.
- ROUTT COUNTY, COLORADO, COALS. By R. L. Herrick. M. & M., vol. 29, p. 230. 9½ columns. I.
- THE CAÑON CITY COAL FIELD, COLORADO. By C. W. Washburne.

- U. S. G. S., Bull. 381, p. 341. 38 pages. I. 1908.
- THE COLORADO SPRINGS COAL FIELDS, COLORADO. By M. L. Goldman. U. S. G. S., Bull. 381, p. 317. 24 pages. I. 1908.
- COAL OF THE DENVER BASIN, COLORADO. By G. C. Martin. U. S. G. S., Bull. 381, p. 297. 10 pages. 1908.
- THE COAL FIELD BETWEEN DURANGO, COLORADO AND MONERO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- THE DURANGO COAL DISTRICT, COLORADO. By J. A. Taff. U. S. G. S., Bull. 316, p. 321. 18 pages. I. 1906.
- THE BOOK CLIFFS COAL FIELD, BETWEEN GRAND RIVER, COLORADO, AND SUNNYSIDE, UTAH. By G. V. Richardson. U. S. G. S., Bull. 316, p. 302. 18 pages. I. 1906.
- RECONNAISSANCE OF THE BOOK CLIFFS COAL FIELD. By G. B. Richardson. U. S. G. S., Bull. 371. 54 pages. I. 1909.
- MINING COAL IN SOUTHERN COLORADO. By K. S. Guiterman. E. & M. J., vol. 88, p. 1009. 20½ columns. I.
- COAL FIELDS OF SOUTHERN COLORADO. M. & M., vol. 30, p. 588. 3½ columns. I.
- COAL MINING AT PRIMERO, COLORADO. By R. L. Herrick. M. & M., vol. 30, p. 598. 2½ columns. I.
- THE DELAGUA COAL MINES, COLORADO. By F. W. Whiteside. M. & M., vol. 29, p. 317. 4½ columns. I.
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 751. 15 pages. I.
- NOTES ON COPPER DEPOSITS IN CHAFFEE, FREMONT, AND JEFFERSON COUNTIES, COLORADO. By W. Lindgren. U. S. G. S., Bull. 340, p. 157. 18 pages. I. 1907.
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 751. 15 pages. I.
- FLUORSPAR IN COLORADO. By E. F. Burchard. Min. & Sci. Press, vol. 99, p. 258. 6½ columns. Map.
- COLORADO'S RARE METAL INDUSTRY. By H. Fleck. M. & M., vol. 30, p. 63. 3½ columns.
- GEOLOGICAL DISTRIBUTION OF THE PRECIOUS METALS IN COLORADO. By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 89, 11 columns, I.; p. 150, 8 columns, I.; p. 316, 9½ columns. I.
- LESSONS FROM GILPIN COUNTY PRACTICE. By G. E. Collins. Min. & Sci. Press, vol. 101, p. 366. 11½ columns.
- THE ALICE MINE: Colorado's Largest Ore Body. By R. L. Herrick. M. & M., vol. 29, p. 294. 6 columns. I.
- REPORT ON THE POVERTY GULCH MINE. By C. W. Henderson. M. & M., vol. 31, p. 586, 5½ columns, I.; p. 694, 7 columns. I.
- GOLD ORE NEAR NEWCASTLE, COLORADO. By F. Rickard. Min. & Sci. Press, vol. 99, p. 503. 1 column. I.
- THE SAN JUAN REGION, COLORADO. By T. T. Read. Min. & Sci. Press, vol. 97, p. 632, 8 columns, I.; p. 668, 10 columns. I.
- GOLD DEPOSITS OF SAN JUAN, COLORADO. By W. C. Prosser. M. & M., vol. 31, p. 335. 5 columns. I.
- MINING IN THE SAN JUAN, COLORADO. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 610, 5½ columns, I.; p. 737, 6½ columns, I.; p. 865, 3½ columns. I.
- THE CRESSON MINE, CRIPPLE CREEK, COLORADO. By R. L. Herrick. M. & M., vol. 31, p. 735. 11½ columns. I.

- PRIMARY GOLD IN A COLORADO GRANITE.** By J. B. Hastings. T. A. I. M. E., vol. 39, p. 97. 6 pages. I.
- LA PLATA MOUNTAINS, COLORADO.** By R. H. Toll. Min. & Sci. Press, vol. 97, p. 741. 6½ columns. Map.
- TREASURE MOUNTAIN, COLORADO.** By C. W. Purington. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.
- LAKE FORK EXTENSION OF THE SILVERTON MINING AREA, COLORADO.** By L. W. Woolsey. U. S. G. S., Bull. 315, p. 26. 5 pages. 1906.
- MINING IN GEORGETOWN QUADRANGLE.** By S. H. Ball. M. & M., vol. 30, p. 205. 9½ columns. Map.
- HAHNS PEAK, COLORADO.** E. & M. J., vol. 86, p. 809. 2½ columns. I.
- GOLD PLACER DEPOSITS NEAR LAY, ROUTT COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 340, p. 84. 13 pages. I. 1907.
- GYPSUM OF THE UNCOMPAHGRE REGION, COLORADO.** By C. E. Sieben-thal. U. S. G. S., Bull. 285, p. 401. 4 pages. I. 1905.
- THE TAYLOR PEAK AND WHITEPINE IRON-ORE DEPOSITS, COLORADO.** By E. C. Harder. U. S. G. S., Bull. 380, p. 188. 10½ pages. I. 1908.
- TAYLOR PEAK IRON DEPOSITS.** By E. C. Harder. Min. & Sci. Press, vol. 100, p. 615. 5 columns. I.
- OCCURRENCE OF LEAD ORE AT LEADVILLE.** E. & M. J., vol. 89, p. 263. 4 columns. I.
- THE LEADVILLE DOWNTOWN DISTRICT.** Min. & Sci. Press, vol. 95, p. 58. 1 column.
- LEADVILLE, COLORADO, ZINC DEPOSITS.** By H. E. Burton. M. & M., vol. 31, p. 436. 2 columns.
- RECENT DEVELOPMENTS ON IRON HILL, LEADVILLE.** By G. O. Orgall. E. & M. J., vol. 89, p. 261. 16 columns. I.
- THE MONTEZUMA MINING DISTRICT, COLORADO.** By E. A. Ritter. E. & M. J., vol. 85, p. 241. 9½ columns. I.
- THE NIOLVARA LIMESTONE OF NORTHERN COLORADO AS A POSSIBLE SOURCE OF PORTLAND CEMENT MATERIAL.** By G. C. Martin. U. S. G. S., Bull. 380, p. 314. 13 pages. I. 1908.
- THE FLORENCE OIL FIELD, COLORADO.** By C. W. Washburne. U. S. G. S., Bull. 381, p. 517. 28 pages. I. 1908.
- THE DEVELOPMENT IN THE BOULDER OIL FIELD, COLORADO.** By C. W. Washburne. U. S. G. S., Bull. 381, p. 514. 2½ pages. 1908.
- GEOLOGY OF THE RANGEL OIL DISTRICT, COLORADO, WITH A SECTION ON THE WATER SUPPLY.** By H. S. Gale. U. S. G. S., Bull. 350, 60 pages. I. 1908.
- DESTRUCTION OF THE SALT-WORKS OF THE COLORADO DESERT BY THE SALTON SEA.** By W. P. Blake. T. A. I. M. E., vol. 38, p. 848. 1 page.
- TUNGSTEN INDUSTRY OF BOULDER COUNTY, COLORADO, IN 1908.** By R. D. George. E. & M. J., vol. 87, p. 1055. 2 columns. Map.
- TUNGSTEN IN SAN JUAN COUNTY, COLORADO.** By W. C. Prosser. E. & M. J., vol. 90, p. 320. 2 columns. I.
- OCCURRENCES OF VANADIUM NEAR TELLURIDE, COLORADO.** By E. R. Zolniski. E. & M. J., vol. 85, p. 1152. 4 columns. I.
- CARNOTITE IN RIO BLANCO COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 315, p. 110. 8 pages. I. 1906.
- CARNOTITE AND ASSOCIATED MINERALS IN WESTERN ROUTT COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 340, p. 257. 6 pages. 1907.

Connecticut

- A GEOGRAPHIC DICTIONARY OF CONNECTICUT.** By H. Gannett. U. S. G. S., Bull. 117. 67 pages. 1894.

THE OLD BRISTOL COPPER MINE, CONNECTICUT. By C. S. Richardson. *Min. Mag.*, vol. 3, p. 251. 5 pages.

The Dakotas

THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA. By A. G. Leonard and C. D. Smith. *U. S. G. S., Bull.* 341, p. 15. 21 pages. I. 1907.

THE WASHBURN LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. *U. S. G. S., Bull.* 381, p. 19. 11 pages. I. 1908.

THE FORT BERTHOLD INDIAN RESERVATION LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. *U. S. G. S., Bull.* 381, p. 30. 10 pages. I. 1908.

THE BOTTINEAU GAS FIELD, NORTH DAKOTA. By J. G. Barry. *E. & M. J.*, vol. 87, p. 1089. 3 columns.

THE BLACK HILLS OF SOUTH DAKOTA. By W. H. Storms. *Min. & Sci. Press*, vol. 101, p. 114, 5 columns, I.; p. 144, 7 columns, I.; p. 264, 7 columns, I.; p. 500, 6 columns; p. 571, 6 columns; p. 669, 6 columns. I.

DRY PLACERS OF THE BLACK HILLS. *Min. & Sci. Press*, vol. 101, p. 571. 1½ columns.

PLACERS OF THE BLACK HILLS, SOUTH DAKOTA. *Min. & Sci. Press*, vol. 101, p. 573. 2 columns.

MICA DEPOSITS OF SOUTH DAKOTA. By D. B. Sterrett. *U. S. G. S., Bull.* 380, p. 382. 3 pages. 1908.

MICA DEPOSITS IN SOUTH DAKOTA. By D. B. Sterrett. *Min. & Sci. Press*, vol. 99, p. 826. 4 columns. I.

TIN, TUNGSTEN, AND TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S., Bull.* 380, p. 131. 32 pages. I. 1908.

TUNGSTEN DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S., Bull.* 380, p. 131. 32 pages. I. 1908.

TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S., Bull.* 380, p. 131. 32 pages. I. 1908.

Delaware

GAZETTEER OF DELAWARE. By H. Gannett. *U. S. G. S., Bull.* 230. 15 pages. 1904.

THE EOCENE DEPOSITS OF THE MIDDLE ATLANTIC SLOPE IN DELAWARE, MARYLAND, AND VIRGINIA. By W. B. Clark. *U. S. G. S., Bull.* 141. 167 pages. I. 1896.

East Indies—Malaysia

GOLD MINING INDUSTRY IN THE DUTCH EAST INDIES. By E. A. Winton. *E. & M. J.*, vol. 88, p. 513. 4½ columns. Map.

OCCURRENCE OF AURIFEROUS AND STANNIFEROUS TOURMALINE IN SUMATRA. By L. Hundeshagen. *E. & M. J.*, vol. 87, p. 1003. ½ column.

MINING IN THE MALAY STATES. By E. S. Marks. *Min. & Sci. Press*, vol. 98, p. 31. 10½ columns. I.

TIN MINING IN ULU SELANGOR, FEDERATED MALAY STATES. By E. Nightingale. *T. I. M. & M.*, vol. 17, p. 159. 12½ pages. I.

MINING LODE TIN IN MALAYA. *E. & M. J.*, vol. 86, p. 371. 4 columns.

Egypt

GOLD MINING IN EGYPT. By C. S. Herzig. *Min. & Sci. Press*, vol. 95, p. 212. 4½ columns. I.

England

HOLYWELL-HALKYN TUNNEL AND MINES, HOLYWELL, NORTH WALES. By J. P. Jones. *T. I. M. E.*, vol. 36, p. 197. 5 pages. I.

MINING IN NEW SOUTH WALES. *Min. & Sci. Press*, vol. 95, p. 182. ¼ column.

THE 1906 BOOM IN CORNWALL. By W. Thomas. *Min. Mag.*, London, vol. 1, p. 233. 4 columns.

THE CHINA-CLAY INDUSTRY OF CORNWALL. By J. H. Collins. *Min. Mag.*, vol. 4, p. 449. 11½ columns. I.

THE KENT COALFIELD IN ENGLAND. E. & M. J., vol. 87, p. 910. 1½ columns.

THE WEMYSS COAL-FIELD, ENGLAND. By J. Gemmell. *T. I. M. E.*, vol. 36, p. 555. 20 pages.

SCOTTISH "EENIE" COAL. By C. T. Clough. *T. I. M. E.*, vol. 37, p. 2. 10 pages. I.

AN ENGLISH GOLD MINE. E. & M. J., vol. 86, p. 98. ½ column.

THE BRITISH GOLD FIELDS, ENGLAND. *Min. Mag.*, vol. 2, p. 282, 3 pages; p. 376, 2 pages.

THE HEMATITE MINES OF CUMBERLAND, ENGLAND. By L. W. Mayer. E. & M. J., vol. 86, p. 358. 18½ columns. I.

THE GREENSIDE LEAD MINES, CUMBERLAND, ENGLAND. By E. T. Borlase. E. & M. J., vol. 85, p. 297. 10 columns. I.

OIL-SHALE AT PUMPHERSTON, SCOTLAND. By W. Caldwell. *T. I. M. E.*, vol. 36, p. 581. 9½ pages. I.

THE PUMPHERSTON, SEA FIELD, AND DEANS WORKS OF THE PUMPHERSTON OIL COMPANY. *T. I. M. E.*, vol. 36, p. 602. 8 pages.

SLATE MINING IN WALES AND CAUSE OF ITS DECLINE. E. & M. J., vol. 85, p. 145. 7½ columns. I.

THE RED RIVER, CORNWALL, ENGLAND. By E. Walker. *Min. & Sci. Press*, vol. 97, p. 849. 2 columns.

Florida

NOTES ON THE CLAYS OF FLORIDA. By G. C. Matson. *U. S. G. S.*, Bull. 380, p. 346. 10 pages. 1908.

FULLER'S EARTH, KAOLIN AND PEAT IN FLORIDA. By E. H. Sellards. E. & M. J., vol. 85, p. 1187. 1 column.

DEVELOPMENTS IN THE FLORIDA PHOSPHATE INDUSTRY. By C. G. Memminger. E. & M. J., vol. 89, p. 184. 3 columns.

PRODUCTION OF PHOSPHATE ROCK IN FLORIDA DURING 1908. By E. H. Sellards. E. & M. J., vol. 88, p. 129. 1½ columns.

PHOSPHATE MINING IN FLORIDA. E. & M. J., vol. 85, p. 597. 1 column.

France

THE MINES OF FRANCE. *Min. Mag.*, vol. 4, p. 237. 6 pages.

GOLD MINING IN FRANCE. By J. A. Rickard. *Min. Mag.*, London, vol. 1, p. 283. 4 columns. I.

GOLD IN FRANCE. *P. C. M. & M. Soc. S. A.*, vol. 7, p. 315. ½ column.

THE GREATEST GOLD MINE OF FRANCE. By T. T. Read. *Min. Mag.*, vol. 4, p. 209. 7 columns. I.

THE THREE PRODUCING GOLD MINES OF FRANCE. By E. Walch. E. & M. J., vol. 87, p. 792. 6 columns. I.

Georgia

A COMMERCIAL OCCURRENCE OF BARITE NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Pholen. *U. S. G. S.*, Bull. 340, p. 458. 4½ pages. I. 1907.

A NEW DISCOVERY OF BAUXITE IN GEORGIA. By Otto Veatch. E. & M. J., vol. 85, p. 688. 1½ columns.

KAOLINS AND FIRE CLAYS OF CENTRAL GEORGIA. By O. Veatch. *U. S. G. S.*, Bull. 315, p. 303. 12 pages. I. 1906.

CANTON COPPER MINE, CHEROKEE COUNTY, GEORGIA. By J. Derby. *Min. Mag.*, vol. 5, p. 395. 2½ pages.

FULLER'S EARTH OF SOUTHWESTERN GEORGIA AND WESTERN FLORIDA. By T. W. Vaughan. *U. S. G. S.*, Mineral Resources, 1901. 13 pages.

GOLD DEPOSITS OF GEORGIA. By E. K. Soper. *Min. & Sci. Press*, vol. 100, p. 923. 3½ columns.

MOORE'S GOLD MINES, DAHLONEGA, GEORGIA. Min. Mag., vol. 2, p. 24. 3 pages.

THE GOLD PLACERS OF LUMPKIN COUNTY, GEORGIA. Min. Mag., vol. 10, p. 457. 20 pages.

GRAPHITE DEPOSITS NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Pholen. U. S. G. S., Bull. 340, p. 463. 2½ pages. 1907.

IRON ORES NEAR ELLIJAY, GEORGIA. By W. C. Pholen. U. S. G. S., Bull. 340, p. 330. 5 pages. 1907.

REVIEW OF FOSSIL IRON ORE DEPOSITS OF GEORGIA. By S. N. Ball. E. & M. J., vol. 88, p. 200. 13½ columns. I.

GEORGIA BROWN IRON-ORE WASH-ERIES. By E. F. McCrossin. M. & M., vol. 31, p. 294. 2½ columns. I.

Germany

UPPER SILICIA COAL MINES. By F. Haas. M. & M., vol. 30, p. 471, 5½ columns.

GERMAN DIATOMACEOUS EARTH. E. & M. J., vol. 87, p. 938. ¼ column.

THE LORRAINE DEPOSITS OF OÖLITIC IRON ORE, GERMANY. By Tony Callot. E. & M. J., vol. 87, p. 1221. 16 columns. I.

THE ILSEDE HÜTTE IRON-MINES AT PEINE, GERMANY. By L. W. Mayer. T. A. I. M. E., vol. 39, p. 351. 6½ pages. I.

LEAD MINING AT MECHERNICH, PRUSSIA. By L. W. Mayer. E. & M. J., vol. 86, p. 169. 11½ columns. I.

SILVER-LEAD MINING IN FREIBERG, GERMANY. By W. G. Brown. E. & M. J., vol. 87, p. 987. 5½ columns.

GEYSERITE: A Variety of Opal, in Germany. E. & M. J., vol. 90, p. 820. 1 column. I.

Idaho

NOTES ON GEOLOGY OF SNOW STORM MINE, IDAHO. By G. Huston. E. & M. J., vol. 90, p. 1109. 3 columns.

SNOWSTORM COPPER DEPOSIT, IDAHO. Min. & Sci. Press, vol. 97, p. 701. 2½ columns. I.

NOTES ON THE FORT HALL MINING DISTRICT, IDAHO. By F. B. Weeks and V. C. Heikes. U. S. G. S., Bull. 340, p. 175. 10 pages. I. 1907.

THE WHITE KNOB COPPER-DEPOSITS, MACKAY, IDAHO. By J. F. Kemp and C. G. Gunther. T. A. I. M. E., vol. 38, p. 269. 29 pages. I.

THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT. By H. S. Auerbach. E. & M. J., vol. 86, p. 65. 17 columns. I.

ORE BODIES OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 86, p. 67. 4 columns. I.

ATLANTA GOLD DISTRICT, IDAHO. By R. N. Bell. E. & M. J., vol. 86, p. 176. 4 columns. I.

BOISE BASIN, IDAHO. By W. A. Scott. Min. & Sci. Press, vol. 101, p. 76. 6 columns. I.

THE ORE BODIES OF THE BUNKER HILL AND SULLIVAN MINE. Min. & Sci. Press, vol. 97, p. 775. 6 columns. I.

AN OCCURRENCE OF MONAZITE IN NORTHERN IDAHO. By F. C. Schrader. U. S. G. S., Bull. 430, p. 184. 7 pages. I. 1909.

TUNGSTEN ORE DEPOSITS OF THE CŒUR D'ALENE. By H. S. Auerbach. E. & M. J., vol. 86, p. 1146. 6½ columns. I.

See also MISCELLANEOUS PRODUCTION.

Illinois

CONCRETE MATERIALS PRODUCED IN THE CHICAGO DISTRICT. By E. F. Burchard. U. S. G. S., Bull. 340, p. 383. 28 pages. I. 1907.

STUDIES OF ILLINOIS COALS. By H. F. Bain. T. A. I. M. E., vol. 40, p. 3. 72 pages. I.

BIBLIOGRAPHY OF ILLINOIS COAL AND ITS UTILIZATION. J. W. Soc. E., vol. 14, p. 326. 2½ pages.

ILLINOIS COAL STATISTICS. M. & M., vol. 31, p. 357. $\frac{1}{2}$ column.

THE COAL MINING INDUSTRY IN ILLINOIS DURING 1908. E. & M. J., vol. 88, p. 77. 4 columns.

THE KINGSTON COAL MINES, PEORIA COUNTY, ILLINOIS. By C. S. Richardson. Min. Mag., vol. 4, p. 379. $7\frac{1}{2}$ pages; vol. 5, p. 1, 24 pages.

THE ILLINOIS COAL FIELD. By A. Bement. J. W. Soc. E., vol. 14, p. 305. 70 pages. I.

THE COAL-RESOURCES OF ILLINOIS. T. A. I. M. E., vol. 40, p. 7. 10 pages. I.

THE ILLINOIS COAL FIELD. By A. Bement. M. & M., vol. 30, p. 709. 7 columns. I.

THE ILLINOIS COAL FIELD. By H. H. Stock. M. & M., vol. 31, p. 54. 6 columns. Map.

COAL INVESTIGATION IN THE SALINE-GALLATIN FIELD, ILLINOIS, AND THE ADJOINING AREA. By F. W. De Wolf. U. S. G. S., Bull. 316, p. 116. 20 pages. I. 1906.

THE OÖLITIC LIMESTONE INDUSTRY AT BEDFORD AND BLOOMINGTON, ILLINOIS. By J. A. Udden. U. S. G. S., Bull. 430, p. 335. 12 pages. 1909.

PETROLEUM FIELDS OF ILLINOIS. By H. F. Bain. Min. & Sci. Press, vol. 99, p. 153. $4\frac{1}{2}$ columns. I.

PUMPING AND SHIPPING OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 678. 6 columns. I.

India

INDIA'S MINERAL PRODUCTION. E. & M. J., vol. 85, p. 1050. $2\frac{1}{2}$ columns.

PETROLEUM IN BURMA. By E. A. Wakefield. Min. & Sci. Press, vol. 99, p. 500. $1\frac{1}{2}$ columns.

A MANGANESE DEPOSIT IN SOUTHERN INDIA. By R. O. Ahles. T. I. M. & M., vol. 18, p. 133. 20 pages. I.

MANGANESE DEPOSITS IN SOUTHERN INDIA. E. & M. J., vol. 87, p. 955. $2\frac{1}{2}$ columns.

RUBY MINES OF THE MOGOK VALLEY, BURMA. Min. & Sci. Press, vol. 99, p. 231. $1\frac{1}{2}$ columns.

Indiana

STRATIGRAPHY AND COAL BEDS OF THE INDIANA COAL FIELD. By G. H. Ashley. U. S. G. S., Bull. 381, p. 9. 10 pages. 1908.

MINING COAL IN SOUTHERN INDIANA. By F. W. Parsons. E. & M. J., vol. 90, p. 869. 11 columns. I.

NATURAL GAS FIELD OF INDIANA. By A. J. Phinney. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 579-742. 1889-90. I.

GLASS-SAND INDUSTRY OF INDIANA, KENTUCKY AND OHIO. By E. F. Burchard. U. S. G. S., Bull. 315, p. 361. 16 pages. 1906.

PEAT BEDS IN INDIANA. E. & M. J., vol. 88, p. 789. $\frac{1}{2}$ column.

THE TRENTON LIMESTONE AS A SOURCE OF PETROLEUM AND INFLAMMABLE GAS IN OHIO AND INDIANA. By E. Orton. U. S. G. S., 8th Ann. Rept. pt. 2, pp. 475-662. 1886-87. I.

Iowa

THE GEOLOGY, MINING AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol. 40, p. 711. $32\frac{1}{2}$ pages. I.

CLAY RESOURCES OF THE ST. LOUIS DISTRICT, MISSOURI. By N. M. Fenneman. U. S. G. S., Bull. 315, p. 315. $6\frac{1}{2}$ pages. I. 1906.

COALFIELDS OF IOWA AND MISSOURI. By H. Hinds. M. & M., vol. 31, p. 80. $4\frac{1}{2}$ columns. I. Map.

LEAD AND ZINC MINING IN IOWA. E. & M. J., vol. 86, p. 805. 1 column.

Jamaica

COPPER IN JAMAICA. Min. & Sci. Press, vol. 99, p. 299. $\frac{1}{2}$ column.

Japan

MINING INDUSTRY IN JAPAN. By T. Haga. Min. & Sci. Press, vol. 101, p. 306. $1\frac{1}{2}$ columns.

THE MINERAL RESOURCES OF KOREA. By H. R. Robbins. T. A. I. M. E., vol. 39, p. 260. 14 pages. I.

NOTES ON THE TAKASIMA COAL MINES, NAGASAKI, JAPAN. By E. W. Nardin. T. A. I. M. E., vol. 8, pt. 1, p. 81. 6 pages. I.

THE KAPSON MINES, KOREA. Min. & Sci. Press, vol. 99, p. 666. $2\frac{1}{2}$ columns.

THE KOSAN MINE, KOREA. By A. D. Weigall. Min. & Sci. Press, vol. 97, p. 878. $2\frac{1}{2}$ columns.

THE KOSAKA COPPER MINE OF JAPAN. Min. & Sci. Press, vol. 101, p. 503. 1 column.

GOLD MINING IN KOREA, 1910. By J. D. Hubbard. Min. & Sci. Press, vol. 101, p. 236. 5 columns. I.

GOLD DEPOSITS IN JAPAN. Min. & Sci. Press, vol. 101, p. 842. $2\frac{1}{2}$ columns.

THE PLACER DEPOSITS OF KOREA. T. A. I. M. E., vol. 39, p. 266. 2 pages. I.

Kansas

A GAZETTEER OF KANSAS. By H. Gannett. U. S. G. S., Bull. 154. 246 pages. I. 1898.

ECONOMIC GEOLOGY OF THE IOLA QUADRANGLE, KANSAS. By G. I. Adams, E. Haworth, and W. R. Crane. U. S. G. S., Bull. 238. 83 pages. I. 1904.

ECONOMIC GEOLOGY OF THE INDEPENDENCE QUADRANGLE, KANSAS. By F. C. Schrader and E. Haworth. U. S. G. S., Bull. 296. 74 pages. I. 1906.

SOUTHERN KANSAS COAL DISTRICT. By L. L. Wittich. M. & M., vol. 31, p. 668. $7\frac{1}{2}$ columns. I.

THE KANSAS STATE COAL MINE. By C. M. Young. E. & M. J., vol. 89, p. 1159. $9\frac{1}{2}$ columns. I.

Kentucky

ECONOMIC GEOLOGY OF THE KENOVA QUADRANGLE (KENTUCKY-OHIO-WEST VIRGINIA). By W. C. Pholen. U. S. G. S., Bull. 349. 158 pages. I. 1908.

CLAY RESOURCES OF NORTHEASTERN KENTUCKY. By W. C. Pholen. U. S. G. S., Bull. 285, p. 411. 6 pages. 1905.

CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.

COAL RESOURCES OF THE KENOVA QUADRANGLE, KENTUCKY. By W. C. Pholen. U. S. G. S., Bull. 285, p. 259. 10 pages. I. 1905.

THE ELKHORN COAL FIELD, KENTUCKY. By R. W. Stone. U. S. G. S., Bull. 316, p. 42. 15 pages. I. 1906.

THE MIDDLESBORO COALFIELD IN KENTUCKY. By J. Howard. E. & M. J., vol. 88, p. 314. 8 columns. I.

GEOLOGY AND MINERAL RESOURCES OF THE CUMBERLAND GAP COAL FIELD, KENTUCKY. By G. H. Ashley and L. C. Glenn. U. S. G. S., Professional Paper 49. 239 pages. I. 1906.

COAL RESOURCES OF THE RUSSELL FORK BASIN (KENTUCKY-VIRGINIA). By R. W. Stone. U. S. G. S., Bull. 348. 127 pages. I. 1908.

THE MIDDLESBORO COAL FIELD, KENTUCKY. By J. Howard. E. & M. J., vol. 85, p. 166. 10 columns. I.

MINING COAL IN BIG STONE GAP FIELD, KENTUCKY. By J. P. Shippen. E. & M. J., vol. 85, p. 1287. 11 columns. I.

KENTUCKY FLUORSPAR AND ITS VALUE TO THE IRON AND STEEL INDUSTRIES. By E. J. Fohs. T. A. I. M. E., vol. 40, p. 261. 13 pages.

OOLITIC LIMESTONE AT BOWLING GREEN AND OTHER PLACES IN KENTUCKY. By J. H. Gardner. U. S. G. S., Bull. 430, p. 373. 7 pages. 1909.

PERIDOTITE OF ELLIOTT COUNTY, KENTUCKY. By J. S. Diller. U. S. G. S., Bull. 38. 31 pages. I. 1887.

See also MISCELLANEOUS PRODUCTION.

Louisiana

OIL AND GAS IN LOUISIANA, WITH A BRIEF SUMMARY OF THEIR OCCURRENCE IN ADJACENT STATES. By G. D. Harris. U. S. G. S., Bull. 429. 192 pages. I. 1910.

Maine

CLAYS OF THE PENOBSCOT BAY REGION, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 428. 4 pages. 1905.

FELDSPAR AND QUARTZ DEPOSITS OF MAINE. By E. S. Bastin. U. S. G. S., Bull. 315, p. 383. 10½ pages. 1906.

GRAPHITE IN MAINE. By G. O. Smith. U. S. G. S., Bull. 285, p. 480. 4 pages. 1905.

THE LIME INDUSTRY OF KNOX COUNTY, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 393. 8 pages. I. 1905.

SOME MOLYBDENUM DEPOSITS OF MAINE, UTAH, AND CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 340, p. 231. 10 pages. 1907.

PEAT DEPOSITS OF MAINE. By E. S. Bastin and C. A. Davis. U. S. G. S., Bull. 376. 127 pages. I. 1909.

NOTE ON A VARIETY OF MAINE SLATE. By T. N. Dale. U. S. G. S., Bull. 285, p. 449. 1½ pages. 1905.

Maryland

GAZETTEER OF MARYLAND. By H. Gannett. U. S. G. S., Bull. 231. 84 pages. 1904.

See also MISCELLANEOUS PRODUCTION.

Massachusetts

A GEOGRAPHIC DICTIONARY OF MASSACHUSETTS. By H. Gannett. U. S. G. S., Bull. 116. 126 pages. 1894.

CLAYS OF CAPE COD, MASSACHUSETTS. By M. L. Fuller. U. S. G. S., Bull. 285 p. 432. 9½ pages. 1905.

BRICK CLAYS NEAR CLINTON, MASSACHUSETTS. By W. C. Alden. U. S. G. S., Bull. 430, p. 402. 3 pages. 1909.

THE WILLISTON LEAD AND COPPER MINE, NORTHAMPTON DISTRICT, MASSACHUSETTS. By C. S. Richardson. Min. Mag., vol. 2, p. 395, 2 pages; p. 634, 2 pages.

CHIEF COMMERCIAL GRANITES OF MASSACHUSETTS, NEW HAMPSHIRE AND RHODE ISLAND. By T. N. Dale. U. S. G. S., Bull. 354. 228 pages. I. 1908.

GEOLOGY OF ROAD-BUILDING STONES OF MASSACHUSETTS, WITH SOME CONSIDERATION OF SIMILAR MATERIALS FROM OTHER PARTS OF THE UNITED STATES. By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 277-341. 1894-95. I.

Mexico

MEXICO, PROGRESS IN 1907. By C. A. Bohn. Min. & Sci. Press, vol. 96, p. 43. 8 columns. I.

MINERAL RESOURCES OF THE STATE OF GUERRERO, MEXICO. By W. Nevin. E. & M. J., vol. 90, p. 672. 9 columns. I.

MORE ABOUT MEXICO. By T. F. Van Wagenen. Min. Mag., vol. 4, p. 43. 8 columns. I.

SUMMER TRAVEL IN MEXICO. By J. A. MacDonald. Min. & Sci. Press, vol. 101, p. 340. 8 columns.

- CHANGING CONDITIONS IN MEXICO.** By H. A. McGraw. E. & M. J., vol. 88, p. 657. 4½ columns.
- IMPORTANT STATES OF CENTRAL AND SOUTHERN MEXICO.** By H. A. Horsfall. E. & M. J., vol. 88, p. 665. 4 columns. I. Map.
- GENERAL CONDITIONS IN MEXICO.** By T. F. Van Wagenen. Min. Mag., London, vol. 3, p. 440. 12 columns. I.
- ON HORSEBACK IN WESTERN CHIHUAHUA.** By M. R. Lamb. E. & M. J., vol. 86, p. 159. 17½ columns. I.
- PRESENT CONDITION OF MINING IN MEXICO.** By F. W. Smith. E. & M. J., vol. 86, p. 655. 4 columns.
- MINING IN MEXICO, PAST AND PRESENT.** By E. A. H. Tays. E. & M. J., vol. 86, p. 665. 8 columns. I.
- LOOKING FOR MINES IN MEXICO.** By W. A. Prichard. Min. Mag., London, vol. 1, p. 205. 13½ columns. I.
- COAL MINES OF MEXICO.** By M. Schwarz. M. & M., vol. 29, p. 33. 3 columns. I.
- THE COAL INDUSTRY IN MEXICO.** By E. Ludlow. E. & M. J., vol. 88, p. 10. ½ column. I.
- COAL IN COAHUILA, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 96, p. 363. 3½ columns. Map.
- THE CARBONIFEROUS DEPOSITS OF NORTHERN COAHUILA.** By J. G. Aguilera. E. & M. J., vol. 88, p. 730. 9½ columns.
- COAL AND IRON EXPLORATIONS IN OAXACA, MEXICO.** By J. L. W. Birkinbine. E. & M. J., vol. 90, p. 668. 10½ columns. I.
- GEOLOGY OF THE OAXACA COAL AND IRON DEPOSITS.** E. & M. J., vol. 90, p. 668. 10 columns. I.
- THE CANANEA CONSOLIDATED COPPER COMPANY IN 1908.** By L. D. Ricketts. E. & M. J., vol. 87, p. 701. 13 columns.
- REVIVAL IN URES, HERMOSILLO AND SAHUARIPA DISTRICTS, SONORA.** By W. L. Wilson. E. & M. J., vol. 90, p. 661. 3 columns.
- SAN ANTONIO COPPER DISTRICT, SONORA, MEXICO.** E. & M. J., vol. 90, p. 1301. 3½ columns. D.
- ORE DEPOSITS OF CANANEA MINING DISTRICT, MEXICO.** By S. F. Emmons. E. & M. J., vol. 90, p. 402. 5 columns. Map.
- LAS PILARES MINE, NACOZARI, MEXICO.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 887. 6½ columns. I.
- ORE DEPOSITS OF THE NACOZARI DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 658. 1½ columns.
- NACOZARI MINING DISTRICT, SONORA, MEXICO.** By B. E. Russell. E. & M. J., vol. 86, p. 657. 16 columns. I.
- THE MAGISTRAL COPPER DISTRICT, MEXICO.** By P. A. Babb. E. & M. J., vol. 88, p. 1215. 4½ columns. I.
- COPPER-GOLD SMELTING AT MAGISTRAL.** By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE ARTEAGA MINING DISTRICT, CHIHUAHUA, MEXICO.** E. & M. J., vol. 89, p. 618. 3 columns. I.
- ARTEAGA DISTRICT, CHIHUAHUA, MEXICO.** By W. B. Winston. Min. & Sci. Press, vol. 98, p. 829. 3½ columns. I.
- THE CALABACILLAS MINE, CHIHUAHUA.** By R. T. Sill. E. & M. J., vol. 90, p. 359. 1½ columns. I.
- MINING OPERATIONS IN THE STATE OF CHIHUAHUA, MEXICO.** By W. H. Seamon. E. & M. J., vol. 90, p. 654. 6½ columns.
- THE ARTEAGA DISTRICT, CHIHUAHUA.** By L. T. Pockman. E. & M. J., vol. 90, p. 656. 3½ columns. I.
- YOQUIVO MINE AND MILL, WESTERN CHIHUAHUA.** By W. H. Seamon. E. & M. J., vol. 90, p. 811. 4 columns. I.
- PACHUCA DISTRICT, MEXICO.** By J. L. Mennell. Min. & Sci. Press, vol. 100, p. 455. 3 columns. I.

- SANTA GERTRUDE'S AND LA BLANCA MINES, PACHUCA, MEXICO. E. & M. J., vol. 88, p. 670. 1 column. I.
- THE SANTA GERTRUDE'S MINE, PACHUCA, MEXICO. E. & M. J., vol. 89, p. 214. 9 columns. I.
- SOME FEATURES OF MINING AT PACHUCA, MEXICO. E. & M. J., vol. 86, p. 1051. 4½ columns.
- SAN RAFAEL Y ANEXAS MINING COMPANY, PACHUCA, MEXICO. By E. Girault. E. & M. J., vol. 90, p. 643. 9 columns. I.
- LAS PILARES MINE, SONORA, MEXICO. By E. M. Robb. M. & M., vol. 31, p. 106. 11½ columns. I.
- OCCURRENCE OF GOLD AND SILVER ORES AT THE LAS PILARES MINE. M. & M., vol. 106. 2½ columns. I.
- MINAS PEDRAZZINI OPERATIONS NEAR ARIZPE, SONORA, MEXICO. By E. L. Dufourcq. E. & M. J., vol. 90, p. 1105. 5½ columns.
- MINING IN OAXACA. By E. M. Lawton. Min. & Sci. Press, vol. 99, p. 232. 3½ columns. I.
- IRON EXPLORATION IN OAXACA, MEXICO. E. & M. J., vol. 90, p. 668. 10 columns. I.
- THE ESPERANZA MINE, EL ORO, MEXICO. By W. E. Hindry. Min. Mag., London, vol. 1, p. 131. 10½ columns. I.
- ORE OF THE ESPERANZA MINE, MEXICO. Min. & Sci. Press, vol. 99, p. 847. 2½ columns.
- MINING IN THE ALAMOS AND ARTEAGA DISTRICTS. By G. M. Bloomer. E. & M. J., vol. 87, p. 699. 6 columns. I.
- ALAMOS-PROMONITOS DISTRICT, MEXICO. By T. P. Brinegar. Min. & Sci. Press, vol. 100, p. 553. 3 columns. I.
- MINING AND SMELTING AT ACHOTLA MINE, GUERRERO, MEXICO. By W. B. Devereux, Jr. E. & M. J., vol. 90, p. 663.
- EL RAYO GOLD MINE, NEAR SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 78. 7 columns. I.
- SAN JOSÉ DE GRACIA, A GREAT MEXICAN GOLD CAMP. By E. A. H. Tays. E. & M. J., vol. 88, p. 640. 16 columns. I.
- MINING IN THE SETENTRION, MEXICO. By M. R. Lamb. Min. & Sci. Press, vol. 97, p. 782. 5 columns. I.
- THE LLUVIA DE ORO MINE. By E. A. H. Tays. Min. & Sci. Press, vol. 100, p. 59. 3 columns. I.
- CHICO, MEXICO. Min. & Sci. Press, vol. 101, p. 473. 4 columns.
- TOPOGRAPHICAL AND OTHER NOTES ON THE CHOIX-GUADALUPE Y CALVO MINING DISTRICT, MEXICO. By A. W. Warwick. Min. & Sci. Press, vol. 95, p. 686. 6 columns. I.
- MINES OF ZOMELAHUACAN, VERACRUZ, MEXICO. By M. Fishback. E. & M. J., vol. 90, p. 1017. 6½ columns. I.
- CONDITIONS AT THE PALMILLA MINE, PARRAL, MEXICO. By F. W. Smith. E. & M. J., vol. 90, p. 259. 11½ columns. I.
- HINDS CONSOLIDATED MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 598. 3 columns. I.
- CALABACILLAS GOLD MINE, MEXICO. By C. W. Geddes. Min. & Sci. Press, vol. 98, p. 689. 2½ columns. I.
- THE GRANADENA MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- JALISCO AND COHINA, MEXICO. By W. A. Scott. Min. & Sci. Press, vol. 98, p. 254. 3 columns. I.
- THE MINES OF NORTHWESTERN ALTAR, SONORA, MEXICO. By G. W. Maynard. E. & M. J., vol. 86, p. 71. 5½ columns. I.
- THE ALTAR GOLD PLACER FIELDS OF SONORA, MEXICO. E. & M. J., vol. 90, p. 651. 6½ columns. I.
- DRY PLACERS IN NORTHERN SONORA, MEXICO. By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 360. 2½ columns. I.

- MINING CEMENT GRAVEL AT ALTAR, MEXICO.** By A. Coll. M. & M., vol. 31, p. 229. 4 columns. I.
- THE GRAPHITE MINES OF SANTA MARIA, MEXICO.** By J. C. Mills. M. & M., vol. 29, p. 98. 2½ columns. I.
- IRON RESOURCES OF THE REPUBLIC OF MEXICO.** By E. Ordonez. E. & M. J., vol. 90, p. 665. 6½ columns.
- EXPLORATION OF CERTAIN IRON-ORE AND COAL DEPOSITS IN THE STATE OF OAXACA, MEXICO.** By J. L. W. Birkinbine. T. A. I. M. E., vol. 41, p. 166. 23 pages. I.
- THE CABRILLAS LEAD MINES OF COAHUILA, MEXICO.** By S. J. Lewis. E. & M. J., vol. 89, p. 1071. 8 columns. I.
- THE GRANADENA MINES, MEXICO.** By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- MINING AND TRANSPORTATION AT SANTA EULALIA.** By C. T. Rice. E. & M. J., vol. 86, p. 33. 9½ columns. I.
- ORES AND MINES OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1283. 9 columns. I.
- THE ORE DEPOSITS OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1229. 10 columns. I.
- THE CUCHILLO PARADO DISTRICT.** By R. H. Butows. Min. & Sci. Press, vol. 95, p. 408. 1½ columns. I.
- GENESIS AND CLASSIFICATION OF MEXICAN ONYX.** By E. M. Lawton. Min. & Sci. Press, vol. 100, p. 791. 1½ columns.
- MEXICAN OILFIELDS.** E. & M. J., vol. 87, p. 1233. 1 column.
- OIL DEVELOPMENTS IN MEXICO.** E. & M. J., vol. 88, p. 660. 1½ columns.
- THE OIL FIELDS OF MEXICO.** By H. S. Denny. Min. Mag., London, vol. 3, p. 36. 8 columns. Map.
- OIL IN MEXICO.** By J. L. Mennell. Min. Mag., London, vol. 2, p. 448. 5 columns. Maps.
- OIL IN MEXICO.** By A. R. Skertchly. Min. Mag., London, vol. 3, p. 283. 6 columns. I.
- OIL IN THE STATE OF VERA CRUZ, MEXICO.** By E. Ordonez. Min. & Sci. Press, vol. 95, p. 247. 3½ columns. I.
- DULCES NOMBRES QUICKSILVER DEPOSITS, MEXICO.** By P. A. Babb. E. & M. J., vol. 88, p. 684. 7½ columns. I.
- THE SALINE DEPOSITS OF CARMEN ISLANDS.** By E. H. Cook. E. & M. J., vol. 85, p. 545. 3½ columns. I.
- THE SILVER MINES OF MEXICO.** By A. F. J. Bordeaux. T. A. I. M. E., vol. 39, p. 357. 11½ pages.
- THE MINERAL RESOURCES OF SONORA.** By F. J. H. Merrill. Min. & Sci. Press, vol. 96, p. 33. 14 columns. I. Map.
- SAN JAVIER, AN OLD SILVER DISTRICT OF SONORA.** By C. N. Nelson. E. & M. J., vol. 90, p. 660. 4 columns. Map.
- LAS CHISPAS MINES, SONORA, MEXICO.** By B. E. Russell. E. & M. J., vol. 86, p. 1006. 6 columns. I.
- EL TIGRE MINE, MONTEZUMA DISTRICT, SONORA, MEXICO.** By R. L. Herrick. M. & M., vol. 29, p. 483. 10 columns. I.
- ORES OF THE EL TIGRE MINE, SONORA, MEXICO.** M. & M., vol. 29, p. 486. ½ column.
- THE PROMONTORIO SILVER-MINE, DURANGO, MEXICO.** By F. C. Lincoln. T. A. I. M. E., vol. 38, p. 734. 16 pages. I.
- REMINISCENCES OF MINING IN DURANGO.** By W. D. Beverly. E. & M. J., vol. 88, p. 635. 14 columns. I.
- A TRIP THROUGH NORTHERN DURANGO.** By C. N. Nelson. E. & M. J., vol. 87, p. 697. 4½ columns. I.

- OLD MINING CAMP OF PAZOS, GUANAJUATO, MEXICO. By H. A. McGraw. E. & M. J., vol. 89, p. 961. 6½ columns. I.
- LORETO MINE AND THE PINGUICO DISTRICT, GUANAJUATO, MEXICO. By C. W. Botsford. E. & M. J., vol. 88, p. 650. 2½ columns. I.
- THE ZACATECAS DISTRICT AND ITS RELATION TO GUANAJUATO AND OTHER CAMPS. By C. W. Botsford. E. & M. J., vol. 87, p. 1227. 4 columns. I.
- NOTES ON GUANAJUATO. By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 83. 2½ columns. I.
- OPERATIONS OF GUANAJUATO DEVELOPMENT COMPANY. E. & M. J., vol. 88, p. 651. 10 columns. I.
- THE WORKING MINES OF GUANAJUATO. By C. T. Rice. E. & M. J., vol. 86, p. 806. 8 columns. I.
- HISTORY OF LA LUZ CAMP, GUANAJUATO, MEXICO. E. & M. J., vol. 88, p. 646. ¾ column.
- THE GUANAJUATO MINING DISTRICT, MEXICO. E. & M. J., vol. 90, p. 1310. 6 columns. I.
- GUANAJUATO, THE GREAT SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 669. 9½ columns. I.
- MINES OF AJUCHITLAN, QUERÉTARO, MEXICO. By S. J. Lewis. Min. & Sci. Press, vol. 100, p. 211. 8½ columns. I.
- THE MINES OF EL DOCTOR, MEXICO. By T. D. Murphy. Min. & Sci. Press, vol. 95, p. 241. 8½ columns. I.
- THE SILVER-LEAD MINES OF SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 464. 12 columns. I.
- ORE OF THE SANTA BARBARA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 208. 2 columns.
- LOS LAMENTOS MINE, CHIHUAHUA. E. & M. J., vol. 87, p. 489. 1 column.
- RECENT MINING DEVELOPMENTS IN CHIHUAHUA. By A. P. Rogers. E. & M. J., vol. 88, p. 681. 6½ columns. I.
- STORIES OF THE BATOPILAS MINES, CHIHUAHUA, MEXICO. By M. R. Lamb. E. & M. J., vol. 85, p. 689. 4½ columns. I.
- SANTA BARBARA MINE, CHIHUAHUA, MEXICO. M. & M., vol. 29, p. 369. 3 columns. I.
- NATIVE SILVER IN SOUTHWESTERN CHIHUAHUA, MEXICO. By W. M. Brodie. E. & M. J., vol. 89, p. 664. 5½ columns. I.
- TRAVELING IN WESTERN CHIHUAHUA, MEXICO. By F. H. Morley. E. & M. J., vol. 87, p. 706. 8½ columns.
- MINING IN NORTHERN SINALOA, MEXICO. By E. A. H. Tays. Min. & Sci. Press, vol. 99, p. 120. 3½ columns. Map.
- THE ANTIGUA OF REAL DE SIVIRIJOA, SINALOA. By E. A. H. Tays. E. & M. J., vol. 90, p. 1155. 5½ columns. I.
- THE SILVER-MINES OF MEXICO: Discussion of Paper of A. F. J. Bordeaux, vol. 39, p. 357.
T. A. I. M. E., vol. 40, p. 848. 5 pages.
- THE ZACUALPAN DISTRICT, MEXICO, By J. M. Platt. E. & M. J., vol. 88, p. 670. 4 columns. I.
- THE SILVER MINE OF "JESUS MARIA," IN NEW LEON, MEXICO. Min. Mag., vol. 1, p. 34. 14 pages; p. 570. 11½ pages.
- MINES OF PENOLES COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 309. 13½ columns. I.
- PACHUCA AND REAL DEL MONTE SILVER DISTRICT, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 519. 17 columns. I.
- SOME REMINISCENCES OF OLD DOLORES, MEXICO. By V. Pender. E. & M. J., vol. 89, p. 1329. 6 columns.

DIENTE, MEXICO. By E. McCormick. Min. & Sci. Press, vol. 95, p. 648. 1 column.

ZACATECAS, A FAMOUS SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 401. 15½ columns. I.

SULPHUR MINING IN MEXICO. By E. F. White. M. & M., vol. 30, p. 75. 3½ columns. I.

THE SULPHUR DEPOSITS OF MAPIMI, MEXICO. By J. D. Villarello. T. I. M. E., vol. 37, p. 676. 2 pages.

ZINC MINING IN CHIHUAHUA, MEXICO. By W. H. Seamon. E. & M. J., vol. 90, p. 679. 1½ columns.

DEL CARMEN ZINC MINE, MEXICO. M. & M., vol. 31, p. 437. 4½ columns. I.

BOQUILLAS ZINC DEPOSITS, MEXICO. By C. Moser. M. & M., vol. 31, p. 479. 1½ columns. I.

Michigan

PORTLAND CEMENT IN MICHIGAN. By L. L. Kimball. U. S. G. S., Mineral Resources, 1903.

COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., 3d Ann. Rept., pp. 89-188. 1881-82. I.

THE COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., Monograph V, 464 pages. I. 1883.

THE LAKE SUPERIOR COPPER MINES. By J. A. Callender. Min. Mag., vol. 2, p. 249. 3 pages.

NOTES FROM THE LAKE SUPERIOR IRON RANGES. By D. E. Woodbridge. E. & M. J., vol. 89, p. 863. 3½ columns.

THE GOGEBIC RANGE. T. L. S. M. I., vol. 15, p. 10. 16 pages.

THE MARQUETTE IRON RANGE. By G. A. Newett. T. L. S. M. I., vol. 14, p. 19. 12 pages. Map.

DEVELOPMENT IN THE MARQUETTE RANGE IRON ORE MINES. M. & M., vol. 30, p. 195. 6 columns. I.

THE SILVER OF THE LAKE SUPERIOR MINERAL REGION. Min. Mag., vol. 1, p. 447. 8 pages; p. 612. ¼ page.

Minnesota

IRON MINING IN MINNESOTA. By E. K. Soper. Min. & Sci. Press, vol. 101, p. 767. 5½ columns. I.

IRON MINING AT COLERAINE, MINNESOTA. By A. H. Fay. E. & M. J., vol. 88, p. 770. 3 columns. I.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF MINNEAPOLIS, MINNESOTA. By E. F. Burchard. U. S. G. S., Bull., 430, p. 280. 12 pages. 1909.

Mississippi

GEOLOGY AND MINERAL RESOURCES OF MISSISSIPPI. By A. F. Crider. U. S. G. S., Bull., 283, 99 pages. I. 1906.

Missouri

COALFIELDS OF IOWA AND MISSOURI. By H. Hinds. M. & M., vol. 31, p. 80. 4½ columns. I. Map.

THE GEOLOGY, MINING AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol. 40, p. 711. 32½ pages. I.

THE ORE-DEPOSITS OF THE JOPLIN REGION, MISSOURI. By F. L. Clerc. T. A. I. M. E., vol. 38, p. 320. 23 pages.

LEAD MINING IN THE JOPLIN DISTRICT. By L. L. Wittich. M. & M. vol. 30, p. 743. 4½ columns. I.

OPERATIONS OF THE DOC RUN LEAD COMPANY. By A. H. Fay. E. & M. J., vol. 89, p. 610. 9 columns. I.

OZARK LEAD- AND ZINC-DEPOSITS: Their Genesis, Localization, and Migration. By C. R. Keyes. T. A. I. M. E., vol. 40, p. 184. 47½ pages. I.; p. 856. 5½ pages.

LEAD AND ZINC ORES IN MISSOURI. By J. R. Finlay. E. & M. J., vol. 86, p. 605. 15½ columns. I.

- ZINC AND LEAD DEPOSITS OF SOUTHWESTERN MISSOURI.** By F. L. Garrison. Min. & Sci. Press, vol. 96, p. 291. 7 columns, I.; p. 325, 7½ columns. I.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** M. & M., vol. 31, p. 327. 3 columns.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** By L. L. Wittich. M. & M., vol. 31, p. 31. 1½ columns.
- THE MINING OF OXIDIZED ZINC ORES.** By L. L. Wittich. M. & M., vol. 30, p. 276. 2 columns. I.
- MIGRATIONS OF THE JOPLIN ZINC BELT.** By C. R. Keyes. E. & M. J., vol. 87, p. 1049. 2½ columns. I.
- TRIPOLI DEPOSITS NEAR SENECA, MISSOURI.** By C. E. Siebenthal and R. D. Mesler. U. S. G. S., Bull. 340, p. 429. 10 pages. I. 1907.
- See also MISCELLANEOUS PRODUCTION.
- Montana**
- NOTES ON THE MINERAL DEPOSITS OF THE BEARPAW MOUNTAINS, MONTANA.** By L. J. Pepperberg. U. S. G. S., Bull. 430, p. 135. 12 pages. I. 1909.
- MINERAL RESOURCES OF THE BIGHORN MOUNTAIN REGION.** By W. H. Darton. U. S. G. S., Bull. 285, p. 303. 8 pages. 1905.
- MINERAL RESOURCES OF THE BIGHORN BASIN.** By C. A. Fisher. U. S. G. S., Bull. 285, p. 311. 4½ pages. 1905.
- CEMENT MATERIAL NEAR HAVRE, MONTANA.** By L. J. Pepperberg. U. S. G. S., Bull. 380, p. 327. 10 pages. 1908.
- CLAYS IN THE KOOTENAI FORMATION NEAR BELT, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 340, p. 417. 7 pages. 1907.
- THE COAL INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1055. 12 columns. I.
- THE COAL MINING INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 87, p. 845. 16½ columns. I.
- THE GREAT FALLS COAL FIELD, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 316, p. 161. 14 pages. I. 1906.
- THE GREAT FALLS COALFIELD IN MONTANA.** By A. T. Shurick. E. & M. J., vol. 87, p. 587. 10½ columns. I.
- THE GREAT FALLS COAL FIELD OF MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 356. 87 pages. I. 1909.
- DEVELOPMENT OF THE BEAR CREEK COAL FIELDS, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 285, p. 269. 2 pages. 1905.
- COAL NEAR THE CRAZY MOUNTAINS, MONTANA.** By R. W. Stone. U. S. G. S., Bull. 341, p. 78. 14 pages. I. 1907.
- THE BULL MOUNTAIN COAL FIELD, MONTANA.** By L. H. Woolsey. U. S. G. S., Bull. 341, p. 62. 16 pages. I. 1907.
- THE MILES CITY COAL FIELD, MONTANA.** By A. J. Collier and C. D. Smith. U. S. G. S., Bull. 341, p. 36. 26 pages. I. 1907.
- THE COAL FIELDS OF PART OF DAWSON, ROSEBUD AND CUSTER COUNTIES, MONTANA.** By A. G. Leonard. U. S. G. S., Bull. 316, p. 194. 18 pages. I. 1906.
- COALS OF CARBON COUNTY, MONTANA.** By N. H. Darton. U. S. G. S., Bull. 316, p. 174. 20 pages. I. 1906.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 341, p. 108. 15 pages. I. 1907.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909.
- THE MILK RIVER COAL FIELD, MONTANA.** By L. J. Pepperberg. U. S. G. S., Bull. 381, p. 82. 26 pages. I. 1908.

- THE CENTRAL PART OF THE BALL MOUNTAIN COAL FIELD, MONTANA.** By R. W. Richards. U. S. G. S., Bull. 381, p. 60. 22 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA.** By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- THE RED LODGE COAL FIELD, MONTANA.** By E. G. Woodruff. U. S. G. S., Bull. 341, p. 92. 16 pages. I. 1907.
- NOTES ON THE COALS OF THE CUSTER NATIONAL FOREST, MONTANA.** By C. H. Wegemann. U. S. G. S., Bull. 381, p. 108. 7 pages. I. 1908.
- RECENT DEVELOPMENTS NEAR HELENA, MONTANA.** E. & M. J., vol. 90, p. 354. 1½ columns. Map.
- RADERSBURG DISTRICT, MONTANA.** Min. & Sci. Press, vol. 101, p. 170. 3 columns. D.
- NOTES ON THE GEOLOGY OF THE RADERSBURG DISTRICT, MONTANA.** By D. C. Bard. E. & M. J., vol. 90, p. 599. 1 column.
- GOLD DEPOSITS OF THE LITTLE ROCKY MOUNTAINS, MONTANA.** By W. H. Emmons. U. S. G. S., Bull. 340, p. 96. 20½ pages. I. 1907.
- THE GRANITE-BIMETALLIC AND CABLE MINES, PHILIPSBURG QUADRANGLE, MONTANA.** By W. H. Emmons. U. S. G. S., Bull. 315, p. 31. 25 pages. I. 1906.
- MINES OF MISSOULA COUNTY, MONTANA.** By J. P. Rowe. M. & M., vol. 31, p. 581. 6½ columns. I.
- JUDITH BASIN, MONTANA.** Min. & Sci. Press, vol. 101, p. 398. 4½ columns. I.
- GYPSEUM DEPOSITS OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1243. 3 columns. I.
- THE NORTH DAKOTA-MONTANA LIGNITE AREA.** By A. G. Leonard. U. S. G. S., Bull. 285, p. 316. 14 pages. 1905.
- THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA.** By A. G. Leonard and C. D. Smith. U. S. G. S., Bull. 341, p. 15. 21 pages. I. 1907.
- THE FORT PECK INDIAN RESERVATION LIGNITE FIELD, MONTANA.** By C. D. Smith. U. S. G. S., Bull. 381, p. 40. 20 pages. I. 1908.
- MONTANA SAPPHIRES.** M. & M., vol. 29, p. 199. ½ column.
- SAPPHIRE IN MONTANA.** Min. & Sci. Press, vol. 95, p. 433. ½ column.
- THE CORBIN DISTRICT, JEFFERSON COUNTY, MONTANA.** By F. Bushnell. E. & M. J., vol. 89, p. 1154. 5½ columns. I.
- ZINC MINING IN BUTTE, MONTANA.** E. & M. J., vol. 87, p. 912. 1 column.

Nebraska

- CEMENT MATERIALS IN REPUBLICAN VALLEY, NEBRASKA.** By N. H. Darton. U. S. G. S., Bull. 430, p. 381. 8 pages. I. 1909.

Nevada

- CENTRAL NEVADA.** By A. H. Elftman. Min. & Sci. Press, vol. 96, p. 398. 2 columns. Map.
- MINING AT HAMILTON, NEVADA.** By W. S. Larsh. M. & M., vol. 29, p. 521. 5 columns. I.
- AN OCCURRENCE OF ASPHALITE IN NORTHEASTERN NEVADA.** By R. Anderson. U. S. G. S., Bull. 380, p. 283. 2½ pages. 1908.
- FOOTHILL COPPER BELT OF THE SIERRA NEVADA.** By J. A. Reid. Min. & Sci. Press, vol. 96, p. 388. 9½ columns. I.
- THE YERINGTON COPPER DEPOSITS.** By F. L. Ransome. M. & M., vol. 30, p. 88. 6 columns. I.
- THE YERINGTON DISTRICT, NEVADA.** By C. S. Durand. M. & M., vol. 31, p. 24. 2½ columns. I.

- THE YERINGTON COPPER DISTRICT, NEVADA. By J. A. Carpenter. Min. & Sci. Press, vol. 101, p. 4. 10½ columns. I.
- YERINGTON COPPER DISTRICT. By F. L. Ransome. Min. & Sci. Press, vol. 100, p. 354. 4½ columns. Map.
- CONDITIONS IN THE YERINGTON COPPER DISTRICT, NEVADA. By J. Tyssowski. E. & M. J., vol. 89, p. 764. 6½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 99, 21 pages. I. 1908.
- SECONDARY COPPER ORES OF THE LUDWIG MINE, YERINGTON, NEVADA. By J. P. Jennings. J. C. M. I., vol. 11, p. 463. 3½ pages.
- RAY CONSOLIDATED MINES, NEVADA. By R. L. Herrick. M. & M., vol. 29, p. 544. 6½ columns. I.
- COPPER MINING AT ELY, NEVADA. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 58. 6 columns. I.
- PRESENT CONDITIONS OF ELY. Min. & Sci. Press, vol. 100, p. 866. 5½ columns. I.
- GEOLOGICAL AND PHYSICAL CONDITIONS OF TONOPAH MINES. By W. P. Jenney. Min. & Sci. Press, vol. 99, p. 685. 3 columns. I.
- THE MINES AND MILLS OF TONOPAH, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 594. 7 columns. I.
- THE GOLDFIELD TYPE OF ORE OCCURRENCE. By R. T. Hill. E. & M. J., vol. 86, p. 1096. 11½ columns. I.
- GOLDFIELD, NEVADA. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 559, 6½ columns, I.; p. 664, 5 columns; p. 738, 6½ columns, I.; p. 774, 6½ columns, I.; p. 840, 8 columns, I.; vol. 97, p. 20, 4½ columns, I.; p. 50, 7½ columns. I.
- GOLDFIELD AND THE GOLDFIELD DISTRICT OF NEVADA. By J. Tyssowski. E. & M. J., vol. 87, p. 1229. 6 columns. I.
- RAWHIDE, NEVADA. By A. Del Mar. E. & M. J., vol. 85, p. 853. 6 columns. I.
- RAWHIDE, NEVADA. By W. F. Boericke. E. & M. J., vol. 85, p. 565. 1 column.
- NOTES ON RAWHIDE, NEVADA. Min. & Sci. Press, vol. 96, p. 424. 3½ columns.
- ORE FORMATION IN THE WONDER DISTRICT, NEVADA. By E. A. Ritter. E. & M. J., vol. 87, p. 290. 7 columns. I.
- MONTGOMERY-SHOSHONE MINE. By A. H. Martin. Min. & Sci. Press, vol. 100, p. 289. 3 columns. I.
- KIMBERLY, NEVADA. By J. A. Carpenter. Min. & Sci. Press, vol. 100, p. 482. 3 columns. I.
- MINING AND MILLING AT RAWHIDE, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 345. 11 columns. I.
- THE SEVEN TROUGHS MINING DISTRICT. By W. M. Hauck. E. & M. J., vol. 85, p. 644. 4 columns. I.
- SEVEN TROUGHS DISTRICT OF NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 790. 6½ columns.
- MANHATTAN, NEVADA. E. & M. J., vol. 86, p. 1002. 3½ columns. I.
- NOTES ON THE MANHATTAN PLACERS, NYE COUNTY, NEVADA. By C. C. Jones. E. & M. J., vol. 88, p. 101. 8 columns. I.
- MINES AND PLANTS OF THE PITTSBURG SILVER PEAK. By H. Hanson. Min. & Sci. Press, vol. 98, p. 657. 9½ columns. I.
- CAMP ALUNITE, A NEW NEVADA GOLD DISTRICT. By R. T. Hill. E. & M. J., vol. 86, p. 1203. 11 columns. I.
- REMINISCENCES OF GOLDFIELD, NEVADA. By M. R. Lamb. E. & M. J., vol. 87, p. 441. 5 columns.
- BANNOCK, NEVADA. By C. S. Thomas. Min. & Sci. Press, vol. 99, p. 820. 1 column. I.

- ROUND MOUNTAIN, NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 568. 2½ columns. I.
- ROUND MOUNTAIN, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 44. 4 pages. I. 1908.
- ROUND MOUNTAIN, NEVADA. By G. A. Packard. Min. & Sci. Press, vol. 96, p. 807. 4½ columns. I.
- NATIONAL, NEVADA. By H. C. Cutler. Min. & Sci. Press, vol. 101, p. 606. 3½ columns. I.
- SOME BULLFROG MINES. By W. H. Spaulding. E. & M. J., vol. 85, p. 159. 5 columns.
- NOTES ON OPERATIONS IN JARBRIDGE CAMP, NEVADA. By W. W. Fisk. E. & M. J., vol. 90, p. 763. 5½ columns. Map.
- REPORT ON MINING GEOLOGY OF EUREKA DISTRICT, NEVADA. By J. S. Curtis. U. S. G. S., 4th Ann. Rept., pp. 221-251. 1882-83. I.
- JARBRIDGE, NEVADA. By W. A. Scott. Min. & Sci. Press, vol. 100, p. 613. 4½ columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. U. S. G. S., Bull. 430, p. 240. 6 pages. I. 1909.
- WHITEPINE IRON-ORE DEPOSITS. By E. C. Harder. Min. & Sci. Press, vol. 100, p. 387. 3 columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. Min. & Sci. Press, vol. 101, p. 212. 2 columns. Map.
- AMARILLA IRON AND PHOSPHATE DEPOSITS, NEVADA. By O. H. Hershey. Min. & Sci. Press, vol. 97, p. 535. 3½ columns.
- THE YELLOWPINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- NICKEL ORE IN NEVADA. E. & M. J., vol. 86, p. 23. ½ column.
- NICKEL-COPPER-PLATINUM ORE IN NEVADA. By A. M. Thompson. E. & M. J., vol. 86, p. 72. ½ column.
- OIL PROSPECTS IN NEVADA. Min. & Sci. Press, vol. 97, p. 817. 2 columns.
- TWO AREAS OF OIL PROSPECTING IN LYON COUNTY, WESTERN NEVADA. By R. Anderson. U. S. G. S., Bull. 381, p. 490. 3 pages. 1908.
- ALLEGED OIL PROSPECTS IN NEVADA. M. & M., vol. 29, p. 335. 1½ columns.
- GEOLOGY AND OIL PROSPECTS OF THE RENO REGION, NEVADA. By R. Anderson. U. S. G. S., Bull. 381, p. 475. 15 pages. 1908.
- PLATINUM IN SOUTHEASTERN NEVADA. By H. C. Bancroft. Min. & Sci. Press, vol. 100, p. 797. ½ column.
- QUICKSILVER IN NEVADA. By W. C. Davis. Min. & Sci. Press, vol. 99, p. 663. ½ column. I.
- THE SILVER-LEAD DEPOSITS OF EUREKA, NEVADA. E. & M. J., vol. 85, p. 123. 3 columns.
- THE COMSTOCK MINES TODAY. By W. Symmes. Min. & Sci. Press, vol. 99, p. 24. 4½ columns. I.
- PROGRESS ON THE COMSTOCK LODGE. By R. L. Herrick. M. & M., vol. 29, p. 150. 10½ columns. I.
- THE GREAT COMSTOCK LODGE. By G. McM. Ross. Min. & Sci. Press, vol. 95, p. 468. 4 columns.
- GEOLOGY AND MINERAL RESOURCES OF THE OSCEOLA MINING DISTRICT, WHITE PINE COUNTY, NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 117. 18 pages. I. 1907.
- THE YELLOWPINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- NOTES ON THE PIOCHE MINING DISTRICT, NEVADA. By S. F. Shaw. E. & M. J., vol. 88, p. 545. 10½ columns. I.
- PIOCHE, NEVADA. By J. W. Abbott. Min. & Sci. Press, vol. 95, p. 176. 4 columns. I.

HORNSILVER DISTRICT, NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 433. 2 columns.

THE HORNSILVER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 41. 3 pages. 1908.

THE BRISTOL MINES, NEVADA. By S. L. Goodale. M. & M., vol. 30, p. 507. 4 columns. I.

TUNGSTEN DEPOSITS IN THE SNAKE RANGE, WHITE PINE COUNTY, EASTERN NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 263. 7 pages. I. 1907.

ZINC MINING AT YELLOW PINE, NEVADA. By N. B. Gregory. M. & M., vol. 31, p. 340. 2½ columns. I.

Newfoundland

THE MINERAL RESOURCES OF NEWFOUNDLAND. By B. Symons. E. & M. J., vol. 90, p. 360. 10 columns. Map.

New Hampshire

SUPPLEMENTARY NOTES ON THE GRANITES OF NEW HAMPSHIRE. By T. N. Dale. U. S. G. S., Bull. 430, p. 346. 26 pages. 1909.

SOME ORE DEPOSITS OF MAINE AND THE MILAN MINE, NEW HAMPSHIRE. By W. H. Emmons. U. S. G. S., Bull. 432, 62 pages. I.

THE SHELBURNE LEAD MINING COMPANY, NEW HAMPSHIRE. By J. T. Hodge. Min. Mag., vol. 1, p. 27. 7½ pages, I.; vol. 3, p. 481. 10 pages.

PYRITE MINING IN NEW HAMPSHIRE. By A. H. Fay. E. & M. J., vol. 88, p. 463. 2 columns. I.

New Hebrides

MINERAL POSSIBILITIES OF THE NEW HEBRIDES ISLANDS. By G. M. Colvocoresses. E. & M. J., vol. 87, p. 957. 3 columns.

THE COPPER LODES OF NEW CALEDONIA. By E. A. Weinberg. T. Au. I. M. E., vol. 7, p. 138. 12 pages. I.

SULPHUR IN THE NEW HEBRIDES ISLANDS. E. & M. J., vol. 87, p. 958. ½ column.

New Jersey

A GEOGRAPHIC DICTIONARY OF NEW JERSEY. By H. Gannett. U. S. G. S., Bull. 118. 131 pages. 1894. I.

COPPER MINING IN NEW JERSEY. By H. B. Kummel. E. & M. J., vol. 87, p. 808. 2 columns.

IRON ORE IN NEW JERSEY. By H. W. Kummel. E. & M. J., vol. 85, p. 1193. 2 columns.

IRON ORE OF NEW JERSEY: Geological Occurrence, Properties and Metallurgy. By W. Kitchell. Min. Mag. vol. 8, p. 332. 16 pages; p. 434, 4 pages.

THE WHITE LIMESTONE AREA OF FRANKLIN, SUSSEX COUNTY, NEW JERSEY. By J. E. Wolff and A. H. Brooks. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 425-458. 1896-97. I.

THE MARLS OF NEW JERSEY. By G. H. Cook. Min. Mag., vol. 5, p. 132. 14 pages.

New Mexico

THE COAL MINES OF DAWSON, NEW MEXICO. By J. E. Sheridan. M. & M., vol. 31, p. 653. 9½ columns. I.

THE ENGLE COAL FIELD, NEW MEXICO. By W. T. Lee. U. S. G. S., Bull. 285, p. 240. 1 page. 1905.

THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.

A RECONNAISSANCE SURVEY OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler. U. S. G. S., Bull. 316, p. 376. 50 pages. I. 1906.

- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL CO., DAWSON, NEW MEXICO. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- THE UNA DELL GATO COAL FIELD, SANDOVAL COUNTY, NEW MEXICO. By M. R. Campbell. U. S. G. S., Bull. 316, p. 427. 4 pages. I. 1906.
- COAL IN THE VICINITY OF FORT STANTON RESERVATION, LINCOLN COUNTY, NEW MEXICO. By M. R. Campbell. U. S. G. S., Bull. 316, p. 431. 4 pages. I. 1906.
- THE COAL FIELD BETWEEN GALLINA AND RATON SPRINGS, NEW MEXICO, IN THE SAN JUAN COAL REGION. By J. H. Gardner. U. S. G. S., Bull. 341, p. 335. 17 pages. I. 1907.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE COAL FIELD BETWEEN GALLUP AND SAN MATEO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull., 341, p. 364. 15 pages. I. 1907.
- ISOLATED COAL FIELD IN SANTA FE AND SAN MIGUEL COUNTIES, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 447. 5 pages. 1908.
- THE CARTHAGE COAL FIELD, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 452. 9 pages. I. 1908.
- THE COAL FIELD BETWEEN SAN MATEO AND CUBA, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 461. 13 pages. I. 1908.
- CARBONACEOUS COAL IN NEW MEXICO. By J. H. Gardner. M. & M., vol. 30, p. 570. 2½ columns. I.
- THE RICH COALFIELDS IN NEW MEXICO. E. & M. J., vol. 86, p. 1251. 1½ columns.
- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL CO., DAWSON, N. M. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- BURRO MOUNTAIN MINING DISTRICT, NEW MEXICO. E. & M. J., vol. 89, p. 1121. 3 columns. I.
- BURRO MOUNTAIN MINING DISTRICT. By I. J. Stauber. M. & M., vol. 30, p. 380. 4½ columns. I.
- SYLVANITE DISTRICT, NEW MEXICO, By G. A. Martin. E. & M. J., vol. 86, p. 962. 3½ columns.
- SYLVANITE, NEW MEXICO, THE NEW GOLD CAMP. By F. A. Jones. E. & M. J., vol. 86, p. 1101. 9 columns. I.
- OCCURRENCE OF ORE AT SYLVANITE, NEW MEXICO. E. & M. J., vol. 86, p. 1102. 3 columns. I.
- THE BLACK RANGE MINING DISTRICT, NEW MEXICO. By M. Fishback. E. & M. J., vol. 89, p. 911. 4 columns. I.
- THE COCHITI MINING DISTRICT, NEW MEXICO. By P. E. Barbour. E. & M. J., vol. 86, p. 173. 6½ columns. I.
- REVIVAL OF MINING IN THE MOGOLONS, NEW MEXICO. By E. G. Spilsbury. E. & M. J., vol. 88, p. 62. 10½ columns. I.
- THE LORDSBURG MINING DISTRICT, NEW MEXICO. By E. D. Fry. E. & M. J., vol. 90, p. 820. 1 column.
- MINES OF THE LORDSBURG DISTRICT, NEW MEXICO. By J. L. Wells. E. & M. J., vol. 87, p. 890. 2½ columns.
- THE MANZANO GROUP OF THE RIO GRANDE VALLEY, NEW MEXICO. By W. T. Lee and G. H. Girty. U. S. G. S., Bull. 309. 141 pages. I. 1909.
- NEW MEXICO GOLD GRAVELS. By J. A. Carruth. M. & M., vol. 31, p. 117. 5 columns. I.
- GYPSUM IN NORTHWESTERN NEW MEXICO. By M. K. Shaler. U. S.

- G. S., Bull. 315, p. 260. 5 pages. I. 1906.
- THE HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. U. S. G. S. Bull. 380, p. 199. 16 pages. I. 1908.
- HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. Min. & Sci. Press, vol. 100, p. 285. 3½ columns. I.
- THE TRES HERMANAS MINING DISTRICT, NEW MEXICO. By W. Lindgren. U. S. G. S., Bull. 380, p. 123. 5 pages. 1908.
- TRES HERMANAS MINING DISTRICT, NEW MEXICO. By W. Lindgren. Min. & Sci. Press, vol. 100, p. 491. 2 columns.
- LUNA COUNTY, NEW MEXICO. By E. McCormick. Min. & Sci. Press, vol. 98, p. 328. 1½ columns.
- MEERSCHAUM IN NEW MEXICO. By D. B. Sterrett. U. S. G. S., Bull. 340, p. 466. 6 pages. 1907.
- GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER DEPOSITS. By C. R. Keyes. T. A. I. M. E., vol. 39, p. 139. 30½ pages. I.
- TURQUOISE MINING, BURRO MOUNTAINS, NEW MEXICO. By E. R. Zalinski. E. & M. J., vol. 86, p. 843. 10 columns. I.
- New York**
- AN ARSENIC MINE IN PUTNAM COUNTY NEW YORK. By E. K. Judd. E. & M. J., vol. 85, p. 306. 1 column.
- FELDSPAR AND QUARTZ DEPOSITS OF SOUTHEASTERN NEW YORK. By E. S. Bastin. U. S. G. S., Bull. 315, p. 394. 4 pages. 1906.
- GOLD IN THE ADIRONDACKS. E. & M. J., vol. 89, p. 620. 5 columns.
- THE FOREST OF DEAN IRON MINE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 85, p. 1091. 5½ columns. I.
- THE CLINTON IRON-ORE DEPOSITS IN NEW YORK STATE. By D. H. Newland. T. A. I. M. E., vol. 40, p. 165. 19½ pages. I.
- THE MAGNETITE BELTS OF PUTNAM COUNTY, NEW YORK. By C. A. Stewart. Sch. Mines Quart., vol. 29, p. 283. 12 pages. I.
- THE IRON DEPOSITS OF NEW YORK STATE. By J. D. Whitney. Min. Mag., vol. 7, p. 255. 3½ pages.
- THE SLATE BELT OF EASTERN NEW YORK AND WESTERN VERMONT. By T. N. Dale. U. S. G. S., 19th Ann. Rept., pt. 3, pp. 153-307. 1897-98. I.
- MINERAL PRODUCTION OF NEW YORK. By D. H. Newland. E. & M. J., vol. 85, p. 1007. 3½ columns.
- THE MINERAL PRODUCTION OF NEW YORK IN 1908. By D. H. Newland. E. & M. J., vol. 87, p. 1273. 4½ columns.
- New Zealand**
- MINING IN NEW ZEALAND. Min. & Sci. Press, vol. 96, p. 233. 2 columns. I.
- THE BLACKWATER MINES AT WAINTA, NEW ZEALAND. By S. Fry. E. & M. J., vol. 89, p. 726. 4 columns. I.
- GOLD AND SILVER MINING IN NEW ZEALAND. By W. Wilson. Min. & Sci. Press, vol. 100, p. 520. 4 columns. I.
- GOLD AND SCHEELITE NEAR MACRAES, NEW ZEALAND. By P. Morgan. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD-BEARING LODS OF BENDIGO AND CARRICK, NEW ZEALAND. By J. Park. Min. & Sci. Press, vol. 97, p. 121. 3½ columns. I.
- THE ORE DEPOSITS OF WAIHI, NEW ZEALAND. By A. M. Finlayson. Min. Mag., London, vol. 2, p. 281. 8½ columns. I.
- Nicaragua**
- MINING IN NICARAGUA. By T. L. Carter. T. A. I. M. E., vol. 41, p. 594. 37 pages. I. Map.

- NICARAGUA MINING CONDITIONS.** Min. & Sci. Press, vol. 101, p. 774. 1 column. I.
- MINING IN NICARAGUA.** By T. L. Carter. Min. Mag., London, vol. 3, p. 123. 10½ columns. I.
- CENTRAL AMERICA: Nicaragua and Its Mines.** Min. Mag., vol. 6, p. 146. 6 pages.
- THE GOLD MINING INDUSTRY IN NICARAGUA.** By T. L. Carter. E. & M. J., vol. 90, p. 1204. 8½ columns. I.
- THE MINING INDUSTRY OF NICARAGUA.** By T. L. Carter. M. & M., vol. 31, p. 566. 4½ columns. I.
- PIZ-PIZ DISTRICT, NICARAGUA.** By W. A. Connelly. Min. & Sci. Press, vol. 100, p. 350. 4 columns. Map.
- GOLD IN EASTERN NICARAGUA.** By C. C. Semple. Min. & Sci. Press, vol. 99, p. 221. 6½ columns. I.
- NOTES ON THE NICARAGUAN GOLDFIELDS.** By M. R. Walker. E. & M. J., vol. 88, p. 263. 3½ columns. I.
- Nova Scotia**
- THE AURIFEROUS ANTIMONY ORE OF WEST GORE, NOVA SCOTIA.** By D. F. Haley. E. & M. J., vol. 88, p. 723. 5½ columns.
- THE CARBONACEOUS AND BITUMINOUS MINERALS OF NEW BRUNSWICK.** By R. W. Ellis. J. C. M. I., vol. 11, p. 204. 15 pages.
- THE SHALE AND CLAY DEPOSITS OF NOVA SCOTIA AND PORTIONS OF NEW BRUNSWICK.** By H. Ries. J. C. M. I., vol. 13, p. 336. 20½ pages. I.
- THE CLAY AND SHALE DEPOSITS OF NOVA SCOTIA.** By H. Ries. J. M. Soc. N. S., vol. 15, p. 9. 18½ pages.
- COAL MINING IN PICTOU COUNTY, NOVA SCOTIA.** By H. E. Coll. E. & M. J., vol. 85, p. 1101. 7 columns. I.
- DOMINION NO. 2 COLLIERY OF THE DOMINION COAL COMPANY.** By A. G. Haultain. J. C. M. I., vol. 13, p. 641. 14 pages. I.
- NOTES ON THE MINING PROPERTY OF THE SEAL HARBOUR MINING COMPANY.** By T. G. MacKenzie. J. M. Soc. N. S., vol. 12, p. 63. 19 pages.
- HOW CAN THE GOLD MINING INDUSTRY OF NOVA SCOTIA BE ASSISTED?** By E. P. Brown. J. M. Soc. N. S., vol. 13, p. 33. 13½ pages.
- SOME OF THE CAUSES OF THE PRESENT CONDITION OF GOLD MINING IN NOVA SCOTIA.** By G. W. Stuart. J. M. Soc. N. S., vol. 12, p. 85. 19½ pages.
- GOLD MEASURES OF TANGIER, NOVA SCOTIA.** By G. A. Packard. Min. & Sci. Press, vol. 95, p. 430. 4 columns. I.
- THE OLDHAM STERLING GOLD MINE, NOVA SCOTIA.** By C. V. Brennan. J. C. M. I., vol. 10, p. 426. 16 pages. I.
- A PRACTICAL SUGGESTION FOR TESTING THE GOLD MINES OF NOVA SCOTIA.** By F. P. Rounan. J. M. Soc. N. S., vol. 13, p. 27. 6 pages.
- GYPSUM ON CAPE BRETON ISLAND, NOVA SCOTIA.** By J. Tyssowski. E. & M. J., vol. 88, p. 569. 4 columns. Maps.
- NEW BRUNSWICK AND THE ACADIAN IRON MINES.** Min. Mag., vol. 6, p. 117. 8 pages.
- IRON ORES OF NOVA SCOTIA.** By P. Thompson. E. & M. J., vol. 88, p. 358. 1½ columns.
- A NEW IRON ORE FIELD IN THE PROVINCE OF NEW BRUNSWICK.** By J. E. Hardman. J. C. M. I., vol. 11, p. 156. 9 pages.
- THE DISCOVERY OF IRON ORE IN THE NEW BRUNSWICK PROVINCE.** J. C. M. I., vol. 11, p. 159. 6 pages.
- STRUCTURE OF THE TUNGSTEN DEPOSITS OF MOOSE RIVER, NOVA SCOTIA.** By E. R. Fairbault. J. M. Soc. N. S., vol. 15, p. 59. 6 pages.

Ohio

THE BEREA GRIT OIL SAND IN THE CADIZ QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 198. 43 pages. I. 1902.

THE BEREA OIL SAND IN FLUSHING QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 346. 30 pages. I. 1908.

Oklahoma (Indian Territory)

A GAZETTEER OF INDIAN TERRITORY (OKLAHOMA). By H. Gannett. U. S. G. S., Bull. 248. 70 pages. 1905.

GEOLOGY OF THE MCALESTER COAL FIELD, INDIAN TERRITORY. By J. A. Taff. U. S. G. S., 19th Ann. Rept., pt. 3, pp. 423-600. 1897-98. I.

GEOLOGY OF EASTERN CHOCTOW COAL FIELD, INDIAN TERRITORY. By J. A. Taff and G. I. Adams. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 257-311. 1899-1900. I.

THE OKLAHOMA COAL FIELDS. By C. N. Gould. M. & M., vol. 29, p. 275. 2½ columns. I.

COAL MINING IN OKLAHOMA. By W. P. Thomas. M. & M., vol. 31, p. 193. 5 columns. I. and Map.

WICHITA MOUNTAINS, OKLAHOMA. By G. W. Kneislly. Min. & Sci. Press, vol. 97, p. 873. 1 column. Map.

REPORT ON ORE DEPOSITS OF THE WICHITA MOUNTAINS, OKLAHOMA. By H. F. Bain. U. S. G. S., Professional Paper 31. 97 pages. I. 1904.

GRAHAMITE DEPOSITS OF SOUTHEASTERN OKLAHOMA. By J. A. Taff. U. S. G. S., Bull. 380, p. 286. 12 pages. I. 1908.

OKLAHOMA GYPSUM DEPOSITS. E. & M. J., vol. 85, p. 315. ¼ column.

ANALYSES OF CRUDE PETROLEUM FROM OKLAHOMA AND KANSAS. By D. T. Day. U. S. G. S., Bull. 381, p. 494. 10 pages. 1908.

THE MADILL OIL POOL, OKLAHOMA. By J. A. Taff and W. J. Reed. U. S. G. S., Bull. 381, p. 504. 12 pages. I. 1908.

MINERAL RESOURCES OF NORTHEASTERN OKLAHOMA. By C. E. Sieben-thal. U. S. G. S., Bull. 340, p. 187. 42 pages. I. 1907.

OKLAHOMA'S NEW ZINC-LEAD DISTRICT. E. & M. J., vol. 87, p. 496. 2½ columns.

MIAMI LEAD AND ZINC DISTRICT IN OKLAHOMA. By O. Ruhl. E. & M. J., vol. 86, p. 910. 8 columns. I.

Oregon

MINERAL RESOURCES OF THE GRANTS PASS QUADRANGLE AND BORDERING DISTRICTS, OREGON. By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 380, p. 48. 32 pages. I. 1908.

A COAL PROSPECT ON WILLOW CREEK, MORROW COUNTY, OREGON. By W. C. Mendenhall. U. S. G. S., Bull. 341, p. 406. 3 pages. 1907.

THE ROGUE RIVER VALLEY COAL FIELD, OREGON. By J. S. Diller. U. S. G. S., Bull. 341, p. 401. 5 pages. I. 1907.

CRACKER CREEK DISTRICT, OREGON. By J. T. Pardee. Min. & Sci. Press, vol. 100, p. 585. 3½ columns. I.

FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON. By J. T. Pardee. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.

THE NORTH POLE MINE, BAKER COUNTY, OREGON. By E. Melzer. E. & M. J., vol. 89, p. 868. 4½ columns. I.

GOLD MINES IN EASTERN OREGON. Min. & Sci. Press, vol. 101, p. 141. 2½ columns. I.

RYE VALLEY GOLD MINES, OREGON. By A. Mathez. Min. & Sci. Press, vol. 99, p. 687. 1½ columns. I.

- MINES OF THE RIDDLES QUADRANGLE, OREGON.** By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 340, p. 134. 19 pages. I. 1907.
- NOTES ON THE BOHEMIA MINING DISTRICT, OREGON.** By D. F. MacDonald. U. S. G. S., Bull. 380, p. 80. 5 pages. 1908.
- PLACER GRAVELS OF THE SUMPTER AND GRANITE DISTRICTS, EASTERN OREGON.** By J. T. Pardee. U. S. G. S., Bull. 430, p. 59. 7 pages. I. 1909.
- PLACERS OF WALDO, SOUTH OREGON.** By J. M. Nicol. Min. & Sci. Press, vol. 99, p. 122. 2½ columns. I.
- NICKEL DEPOSITS OF NICKEL MOUNTAIN, OREGON.** By G. F. Kay. U. S. G. S., Bull. 315, p. 120. 8 pages. 1906.
- THE MALHEUR-OIL FIELDS OF OREGON.** E. & M. J., vol. 88, p. 512. ¼ column.
- PLATINUM AT THE CRACKER JACK MINE, DOUGLAS COUNTY, OREGON.** By H. B. Pulsifer. E. & M. J., vol. 86, p. 1003. 2½ columns.
- STRUCTURAL MATERIALS IN PARTS OF OREGON AND WASHINGTON.** By N. H. Darton. U. S. G. S., Bull. 387. 36 pages. I. 1909.
- A TIN DEPOSIT NEAR SPOKANE.** By A. R. Whitman. Min. & Sci. Press, vol. 95, p. 49. 1½ columns. I.
- Panama**
- MINING IN PANAMA.** By S. Turner. Min. & Sci. Press, vol. 96, p. 130. 5½ columns. I.
- Pennsylvania**
- ECONOMIC GEOLOGY OF THE AMITY QUADRANGLE IN EASTERN WASHINGTON COUNTY, PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 300. 145 pages. I. 1907.
- ECONOMIC GEOLOGY OF THE BEAVER QUADRANGLE, PENNSYLVANIA.** By L. H. Woolsey. U. S. G. S., Bull. 286. 132 pages. I. 1906.
- MINERAL RESOURCES OF THE KITTANNING AND RURAL VALLEY QUADRANGLES, PENNSYLVANIA.** By C. Butts. U. S. G. S., Bull. 279. 198 pages. I. 1906.
- MINERAL RESOURCES OF THE ELDERS RIDGE QUADRANGLE, PENNSYLVANIA.** By R. W. Stone. U. S. G. S., Bull. 256. 86 pages. I. 1905.
- NOTES ON CLAYS AND SHALES IN CENTRAL PENNSYLVANIA.** By G. H. Ashley. U. S. G. S., Bull. 285, p. 442. 2 pages. 1905.
- WHITE CLAYS OF SOUTH MOUNTAIN, PENNSYLVANIA.** By G. W. Stose. U. S. G. S., Bull. 315, p. 322. 12½ pages. I. 1906.
- CLAYS AND SHALES OF SOUTHWESTERN CAMBRIA COUNTY, PENNSYLVANIA.** By W. C. Phalen and L. Martin. U. S. G. S., Bull. 315, p. 344. 10 pages. 1906.
- CLAYS AND SHALES OF CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA.** By E. F. Lines. U. S. G. S., Bull. 315, p. 335. 8 pages. 1906.
- A GENERAL VIEW OF THE ANTHRACITE COAL REGION OF PENNSYLVANIA.** By H. W. Poole. Min. Mag., vol. 4, p. 245. 4 pages.
- THE LACKAWANA COAL BASIN: Its Geology and Mining Resources Around Scranton, Pennsylvania.** By H. D. Rodgers. Min. Mag., vol. 2, p. 388, 6 pages; p. 475; 15 pages, I.; p. 609, 12 pages.
- PROPERTY OF THE SHORT MOUNTAIN COAL COMPANY, LYKENS VALLEY, PENNSYLVANIA.** Min. Mag., vol. 1, p. 468. 7½ pages.
- THE SOUTHERN ANTHRACITE COAL-FIELD.** By J. H. Haertter. E. & M. J., vol. 85, p. 653. 9 columns. I.
- ANTHRACITE COAL MINING.** By H. C. Chance. U. S. G. S., Mineral Resources. 1883 and 1884, vol. 14.
- COAL MINING IN SOUTHERN ANTHRACITE FIELD.** By T. F. Dowling.

- E. & M. J., vol. 86, p. 475. 10 columns. I.
- MOREA COLLIERY BASIN, NORTH-EASTERN PENNSYLVANIA. M. & M. vol. 30, p. 730. 1½ columns. I.
- THE TUNUNGWANT COAL FIELD OF MCKEAN COUNTY, PENNSYLVANIA. By D. D. Owen. Min. Mag., vol. 9, p. 244, 12 pages; p. 306, 10 pages.
- THE LYCOMING IRON AND COAL COMPANY, PENNSYLVANIA. Min. Mag., vol. 1, p. 455. 13½ pages.
- THE COAL LANDS OF THE CLINTON COUNTY COAL COMPANY, PENNSYLVANIA. Min. Mag., vol. 3, p. 513. 5½ pages.
- SMITHING COAL OF PENNSYLVANIA. Second Geol. Rept. Pa. G., p. 202. 10 pages.
- THE SAGMORE BITUMINOUS COAL MINES, CLEARFIELD DISTRICT, PENNSYLVANIA. By E. K. Judd. E. & M. J., vol. 85, p. 605. 6 columns. I.
- A TYPICAL RIVER MINE IN PENNSYLVANIA. By F. W. Parsons. E. & M. J., vol. 89, p. 326. 18 columns. I.
- DONOHUE COKE COMPANY, NEAR GREENSBURG, PENNSYLVANIA. By C. R. King. M. & M., vol. 29, p. 445. 7½ columns. I.
- BUFFALO-SUSQUEHANNA SAGMORE MINE. By R. D. N. Hall. M. & M., vol. 31, p. 645. 8½ columns. I.
- THE JENNER MINE OF THE SOMERSET COAL COMPANY, PENNSYLVANIA. By J. L. Wagner. M. & M., vol. 29, p. 323. 2½ columns. I.
- COAL RESOURCES OF JOHNSTOWN, PENNSYLVANIA, AND VICINITY. By W. C. Phalen. U. S. G. S., Bull. 316, p. 20. 22 pages. I. 1906.
- COALS OF THE CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA. By E. F. Lines. U. S. G. S., Bull. 316, p. 13. 9 pages. I. 1906.
- THE PUNXSUTAWNEY AND GLEN CAMPBELL COAL FIELDS OF INDIANA AND JEFFERSON COUNTIES, PENNSYLVANIA. By F. B. Peck and G. H. Ashley. U. S. G. S., Bull. 285, p. 276. 4 pages. 1905.
- CLEARFIELD COAL FIELD, PENNSYLVANIA. By G. H. Ashley. U. S. G. S., Bull. 285, p. 271. 5 pages. I. 1905.
- THE MARIANNA COAL MINES. By H. M. Phelps. M. & M., vol. 31, p. 523. 7½ columns. I.
- THE COPPER DEPOSITS OF SOUTH MOUNTAIN IN SOUTHERN PENNSYLVANIA. By G. W. Stose. U. S. G. S., Bull. 430, p. 122. 10 pages. I. 1909.
- GANISTER IN BLAIR COUNTY, PENNSYLVANIA. By C. Butte. U. S. G. S., Bull. 380, p. 337. 5 pages. 1908.
- GRAVEL AND SAND IN THE PITTSBURG DISTRICT, PENNSYLVANIA. By E. W. Shaw. U. S. G. S., Bull. 430, p. 388. 12 pages. I. 1909.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 359, 102 pages. I. 1908.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN BERKS AND LEBANON COUNTIES, PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 315, p. 185. 4½ pages. 1906.
- THE JAUSS IRON MINE, DILLSBURG, PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 430, p. 247. 3 pages. 1909.
- THE CLINTON IRON-ORE DEPOSITS IN THE STONE VALLEY, HUNTINGDON COUNTY, PENNSYLVANIA. By J. J. Rutledge. T. A. I. M. E., vol. 40, p. 134. 30 pages. I.
- DEPOSITS OF BROWN IRON ORE NEAR DILLSBURG, YORK COUNTY, PENNSYLVANIA. By E. C. Harder. U. S. G. S., Bull. 430, p. 250. 5½ pages. 1909.
- THE MINERAL-PAINT ORES OF LEHIGH GAP, PENNSYLVANIA. By E. C. Eckel. U. S. G. S., Bull. 315, p. 435. 3 pages. 1906.

- PAINT-ORE DEPOSITS NEAR LEHIGH GAP, PENNSYLVANIA.** By F. T. Agthe and J. L. Dynan. U. S. G. S., Bull. 430, p. 440. 14 pages. I. 1909.
- OTHER DEPOSITS OF EASTERN PENNSYLVANIA.** By J. C. Stoddard and A. C. Callen. U. S. G. S., Bull. 430, p. 424. 15 pages. I. 1909.
- LIMESTONES OF SOUTHWESTERN PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 249. 52 pages. I. 1905.
- THE NINEVEH AND GORDON OIL SANDS IN WESTERN GREENE COUNTY, PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 285, p. 362. 4½ pages. 1905.
- PHOSPHOROUS ORE AT MOUNT HOLLY SPRINGS, PENNSYLVANIA.** By G. W. Store. U. S. G. S., Bull. 315, p. 474. 9 pages. 1906.
- PERUVIAN PLACER MINES.** Min. & Sci. Press, vol. 101, p. 741. ½ column.
- SAN ANTONIO DE POTO HYDRAULIC MINE, PERU.** By W. E. G. Firebrace. Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- ANDEAN PLACERS, PERU AND BOLIVIA.** Min. & Sci. Press, vol. 99, p. 61. 1 column.
- QUICKSILVER AT HUANCAYETICA, PERU.** By L. W. Strauss. Min. & Sci. Press, vol. 99, p. 561. 11½ columns. I.
- THE CERRO DE PASCO MINING DISTRICT, PERU.** By C. C. Sample. E. & M. J., vol. 85, p. 155. 11 columns. I.
- NITRATE OF SODA: Its Abundance in South Peru.** Min. Mag., vol. 3, p. 499. 7 pages.
- VANADIUM IN PERU.** By S. Jochamowitz. E. & M. J., vol. 87, p. 996. ½ column.
- VANADIUM DEPOSITS IN PERU.** By D. F. Hewett. Min. & Sci. Press, vol. 98, p. 619. 5½ columns.
- VANADIUM-DEPOSITS IN PERU.** By D. F. Hewett. T. A. I. M. E., vol. 40, p. 274. 25½ pages. I.; Discussion, p. 861, 2½ pages.

Peru

- PROGRESS IN PERU.** By L. W. Strauss. Min. Mag., vol. 4, p. 216. 4 columns. Map.
- THE PHYSICAL FEATURES AND MINING INDUSTRY OF PERU.** By G. T. Adams. T. A. I. M. E., vol. 39, p. 250. 10 pages. I.
- THE MINING DISTRICTS OF CENTRAL PERU.** By J. C. Pickering. E. & M. J., vol. 85, p. 997. 14½ columns. I.
- THE PHYSICAL FEATURES AND MINING INDUSTRY OF PERU.** By G. T. Adams. T. A. I. M. E., vol. 39, p. 250. 10 pages. I.
- BIBLIOGRAPHY OF LITERATURE ON MINING IN PERU.** T. A. I. M. E., vol. 39, p. 258. 2 pages.
- THE COAL DEPOSITS OF PERU.** By Z. C. B. Borlkjof. E. & M. J., vol. 88, p. 983. 1½ columns.
- BEDDED GOLD QUARTZ VEINS NEAR POTO, PERU.** By E. C. Thurston. E. & M. J., vol. 90, p. 597. 3½ columns. I.
- METALLIC MINERAL RESOURCES OF THE PHILIPPINES.** By M. Goodman. E. & M. J., vol. 86, p. 706. 3½ columns.
- PHILIPPINE COAL MINES.** Min. & Sci. Press, vol. 100, p. 323. 2 columns.
- MINING COAL IN THE PHILIPPINE ISLANDS.** By R. Hawxhurst. E. & M. J., vol. 88, p. 879. 4 columns.
- PHILIPPINE COALS.** By A. J. Cox. E. & M. J., vol. 86, p. 1058. 4 columns.
- PHILIPPINE COAL FIELDS.** By J. B. Dilworth. T. A. I. M. E., vol. 39, p. 653. 11 pages. I.

Philippine Islands

- COPPER IN THE PHILIPPINES.** By W. D. Smith. E. & M. J., vol. 89, p. 30. 1 column.
- THE PHILIPPINE GOLD MINES.** By M. Woolley. M. & M., vol. 31, p. 464. 4 columns. I.
- GOLD IN THE PHILIPPINES.** By H. G. Ferguson. E. & M. J., vol. 88, p. 1165. 5 columns. I.
- ARORAY DISTRICT, MASBATE, PHILIPPINE ISLANDS.** Min. & Sci. Press, vol. 100, p. 388. 3 columns.
- PARACALE AND MAMBULAO DISTRICTS.** By W. D. Smith. Min. & Sci. Press, vol. 100, p. 453. 4 columns.
- PETROLEUM AND NATURAL GAS IN THE PHILIPPINES.** By W. D. Smith. E. & M. J., vol. 88, p. 1285. 1½ columns.
- PHOSPHATE DEPOSITS IN THE PHILIPPINES.** U. S. G. S. 21st Ann. Rept., pt. 3. 644 pages. 1899-1900. I.
- Portugal**
- PORTUGUESE MINING NOTES.** By C. L. Major. E. & M. J., vol. 88, p. 322. 1½ columns. I.
- Rhode Island**
- A GEOGRAPHIC DICTIONARY OF RHODE ISLAND.** By H. Gannett. U. S. G. S., Bull. 115. 31 pages. 1894.
- THE COAL FIELDS OF BRISTOL COUNTY AND OF RHODE ISLAND.** By E. Hitchcock. Min. Mag., vol. 1, p. 582. 10 pages.
- Russia**
- SIBERIAN IMPRESSIONS.** By H. G. Nichols. Min. Mag., vol. 4, p. 132. 9 columns. I.
- NATIVE METHODS IN SIBERIA.** By F. L. Lowell. Min. & Sci. Press, vol. 101, p. 600. 4½ columns. I.
- MINING IN SIBERIA.** E. & M. J., vol. 88, p. 172. 2½ columns.
- THE BOGOSLOOSK MINING ESTATE.** By W. H. Shockley. T. A. I. M. E., vol. 39, p. 274. 29 pages. I.
- THE BOGOSLOOSK MINING ESTATE:** Discussion of the paper of W. H. Shockley, p. 274. T. A. I. M. E., vol. 39, p. 897. 1½ pages.
- COAL MINING ON THE KIRGHESE STEPPE, IN THE AKMOLINSK DISTRICT OF SOUTH-WESTERN SIBERIA.** By E. Watson. T. I. M. E., vol. 37, p. 124. 10 pages. I.
- THE ATBASAR COPPER DISTRICT.** By W. Pellew-Harvey. Min. Mag., London, vol. 2, p. 59. 8 columns. I.
- NOTES ON THE ZANGEZOUR COPPER MINES.** By A. L. Simon. T. I. M. & M., vol. 18, p. 413. 12 pages.
- RUSSIAN FAR EASTERN GOLD FIELD.** M. & M., vol. 31, p. 447. 2 columns.
- GOLD MINING IN SIBERIA.** Min. & Sci. Press, vol. 20, p. 394. 1½ columns.
- GOLD AND OTHER MINERALS OF EASTERN SIBERIA.** By S. F. G. White. E. & M. J., vol. 87, p. 1034. 4½ columns.
- MINING IN SIBERIA.** By C. W. Purington. Min. & Sci. Press, vol. 98, p. 251. 3 columns.
- KOLCHAN PLACER OF THE ORSK GOLD-FIELDS, LTD.** By C. W. Purington. E. & M. J., vol. 90, p. 1202. 5½ columns.
- MANGANESE MINING IN THE CAUCASUS.** By A. Muls. Min. Mag., London, vol. 2, p. 439. 4 columns. I.
- RUSSIAN PLATINUM AND FOREIGN COMPANIES IN RUSSIA.** By V. X. Prardinsky. E. & M. J., vol. 89, p. 1025. 5½ columns.
- RUSSIAN PLATINUM DEVELOPMENTS.** M. & M., vol. 30, p. 400. 2 columns.
- RECENT PROGRESS AT MAIKOP: A Russian Oil Field.** By T. J. Hoover. Min. Mag., vol. 4, p. 298. 3 columns. I.
- PROBLEMS OF THE RUSSIAN OIL INDUSTRY.** By F. Richards. E. & M. J., vol. 88, p. 69. 4 columns.

RUSSIAN PETROLEUM. M. & M., vol. 30, p. 655. 3 columns.

OILFIELDS OF SAKHALIN. By C. E. Pfaaffins. Min. Mag., London, vol. 3, p. 447. 2 columns.

MAIKOP OIL-FIELD. By A. B. Thompson. Min. Mag., London, vol. 2, p. 277. 7½ columns. I.

THE SALT MINING INDUSTRY IN THE RUSSIAN EMPIRE. By F. Thiess. T. I. M. E., vol. 37, p. 702. 1½ pages.

THE TYNTICHA ZINC MINE, SIBERIA. By C. W. Purington. Min. & Sci. Press, vol. 99, p. 200. 1½ columns.

Spain

CINNABAR IN SPAIN. Min. Mag., vol. 7, p. 150. 4½ pages.

THE RIO TINTO COPPER DISTRICT. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 165. 14 pages. I.

PRODUCTION OF IRON ORE IN SPAIN. By H. A. McBride. M. & M., vol. 31, p. 577. 6½ columns. I.

Sweden

THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON-ORE. By H. Sjogren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.

MINING COAL IN SPITZBERGEN, NORWAY. By T. Collot. E. & M. J., vol. 88, p. 1274. 2 columns. I.

Tasmania

TIN DEPOSITS OF TASMANIA. M. & M., vol. 31, p. 309. 4 columns. I.

NOTES ON THE ZEEHAN MINING FIELD, TASMANIA. By S. W. Williams. E. & M. J., vol. 89, p. 713. 7¼ columns. I.

TIN MINING IN TASMANIA. By J. B. Lewis. E. & M. J., vol. 85, p. 485. 12½ columns. I.

MOUNT BISCHOFF OF TASMANIA. By F. H. Bathurst. Min. Mag., London, vol. 3, p. 195. 10 columns. I.

GRAVEL MINING IN TASMANIA. Min. Mag., London, vol. 3, p. 383. 1½ columns. I.

AN EXTENSIVE IRON FORMATION, WEST COAST OF TASMANIA. By D. Jones. T. Au. I. M. E., vol. 5, p. 117. 6 pages.

Tennessee

CEMENT RESOURCES OF THE CUMBERLAND GAP DISTRICT, TENNESSEE-VIRGINIA. By E. C. Eckel. U. S. G. S., Bull. 285, p. 374. 2½ pages. 1905.

CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.

THE CLAYS OF TENNESSEE. By G. H. Ashley. Min. & Sci. Press, vol. 101, p. 712. 1½ columns.

THE WIND ROCK COAL MINE, TENNESSEE. By W. S. Hutchinson. M. & M., vol. 31, p. 1. 6 columns. I.

COAL IN TENNESSEE. Min. Mag., vol. 8, p. 450. 10 pages.

THE CUMBERLAND COAL FIELDS, TENNESSEE. By J. P. Listey. Min. Mag., vol. 5, p. 45. 13 pages. I.

DUCKTOWN COPPER DEPOSIT, TENNESSEE. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 182. 3½ pages.

COPPER REGION OF TENNESSEE: A Sketch of the Geology of Tennessee. By R. O. Currey. Min. Mag., vol. 8, p. 156. 7 pages.

GOLD AND SILVER IN TENNESSEE. Min. Mag., vol. 8, p. 237. 4½ pages.

TONNAGE ESTIMATES OF CLINTON IRON ORE IN THE CHATTANOOGA REGION OF TENNESSEE, GEORGIA, AND ALABAMA. By E. F. Burchard. U. S. G. S., Bull. 380, p. 169. 20 pages, 1908.

IRON OPERATIONS IN THE CHATTANOOGA DISTRICT. By E. Higgins. E. & M. J., vol. 87, p. 1. 15 columns. I.

CONDITION OF THE PHOSPHATE INDUSTRY IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 89, p. 180. 3 columns.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 153. 3½ columns. I.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 404. 2 columns.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 573. 2 columns.

PHOSPHATE ROCK IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 1150. 2½ columns.

THE EAST TENNESSEE ZINC MINING DISTRICT. By S. W. Osgood. E. & M. J., vol. 87, p. 401. 9½ columns. I.

CHARACTER OF ORE IN THE EAST TENNESSEE ZINC DISTRICT. E. & M. J., vol. 87, p. 402. ½ column.

Texas

A GAZETTEER OF TEXAS. By H. Gannett. U. S. G. S., Bull. 190, 162 pages, I., 1902; Bull. 224, 177 pages, I., 1904.

NORTHWEST BOUNDARY OF TEXAS. By M. Baker. U. S. G. S., Bull. 194. 51 pages. I. 1902.

PORTLAND CEMENT MATERIALS NEAR EL PASO, TEXAS. By G. B. Richardson. U. S. G. S., Bull. 340, p. 411. 4 pages. 1907.

MINERALS OF THE RARE-EARTH METALS AT BARINGER HILL, LLANO COUNTY, TEXAS. By F. L. Hess. U. S. G. S., Bull. 340, p. 286. 8 pages. 1907.

PRELIMINARY REPORT ON PRE-CAMBRIAN GEOLOGY AND IRON ORES OF LLANO COUNTY, TEXAS. By S. Paige. U. S. G. S., Bull. 430, p. 256. 12 pages. 1909.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF AUSTIN, TEXAS. By E. F. Burchard. U. S. G. S., Bull. 430, p. 292. 24 pages. 1909.

CONDITION OF THE QUICKSILVER INDUSTRY IN TEXAS. By W. B. Phillips. E. & M. J., vol. 88, p. 1022. 8 columns.

MERCURY MINERALS FROM TERLINGUA, TEXAS. By W. F. Hillsbrand and W. T. Schaller. U. S. G. S., Bull. 405. 174 pages. I. 1909.

THE PRESIDIO-SILVER MINES, SHAFER, TEXAS. By M. P. Kirk. E. & M. J., vol. 88, p. 818. 4½ columns. I.

SHAFTER SILVER DISTRICT, PRESIDIO COUNTY, TEXAS. By W. B. Phillips. E. & M. J., vol. 90, p. 1303. 6½ columns. I.

TEXAS CELESTITE DEPOSITS. By F. L. Hess. E. & M. J., vol. 88, p. 117. 2½ columns. I.

FRANKLIN MOUNTAIN TIN PROSPECTS. By R. Chauvenet. M. & M., vol. 30, p. 529. 4½ columns.

Turkey

MINERAL RESOURCES OF THE TURKISH EMPIRE. By L. Dominian. Min. & Sci. Press, vol. 98, p. 821. 10 columns. Map.

MINERAL DEPOSITS IN TREBIZOND, TURKEY. Min. & Sci. Press, vol. 99, p. 299. 1½ columns. I.

COAL IN TURKEY. Min. & Sci. Press, vol. 98, p. 821. 3 columns.

COPPER IN TURKEY. Min. & Sci. Press, vol. 98, p. 824. 1 column.

GOLD AND SILVER IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.

IRON IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. ½ column.

LEAD IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.

MERCURY IN TURKEY. Min. & Sci. Press, vol. 98, p. 826. 1 column.

United States (General)

A DICTIONARY OF GEOGRAPHIC POSITIONS. By H. Gannett. U. S. G. S., Bull. 123. 183 pages. I. 1895.

- AREAS OF THE UNITED STATES, THE STATES AND THE TERRITORIES.** By H. Gannett. U. S. G. S., Bull. 302. 9 pages. I. 1906.
- DISTRIBUTION OF THE NATION'S MINERAL WEALTH.** By G. O. Smith. Min. & Sci. Press, vol. 97, p. 880. 2 columns.
- THE MINES AND MINERAL RESOURCES OF AMERICA.** Min. Mag., vol. 1, p. 23, 3 pages; p. 109, 5 pages; p. 232, 2½ pages; p. 347, 2½ pages; p. 489, 5½ pages.
- THE MINERAL WEALTH OF THE CORDILLERAS.** By R. W. Raymond and W. R. Ingalls. E. & M. J., vol. 88, p. 678. 7½ columns.
- MINERAL RESOURCES OF THE UNITED STATES.** Min. & Sci. Press, vol. 96, p. 138. 2 columns.
- SOME REMARKS ON THE METALLIC WEALTH OF THE UNITED STATES, DESCRIBED AND COMPARED WITH OTHER COUNTRIES.** Min. Mag., vol. 3, p. 471. 5 pages.
- BORAX-DEPOSITS OF THE UNITED STATES.** By C. R. Keys. T. A. I. M. E., vol. 40, p. 674. 36½ pages. I. Discussion, p. 909. 6 pages.
- See also MISCELLANEOUS DISTRICTS.
- THE COAL-FIELDS OF THE UNITED STATES.** By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- THE COALFIELDS OF THE UNITED STATES.** E. & M. J., vol. 87, p. 160. 8 columns. I.
- PACIFIC COAST COALS.** Min. & Sci. Press, vol. 22, p. 216. ½ column.
- ANTHRACITE COAL ON THE PACIFIC COAST.** E. & M. J., vol. 90, p. 920. 1 column. I.
- COAL MINING IN THE MIDDLE WEST.** By G. H. Cushing. Min. & Sci. Press, vol. 100, p. 130. 3½ columns.
- FUEL IN THE INTERMOUNTAIN REGION.** By D. Harrington. M. & M., vol. 29, p. 493. 4½ columns.
- THE BARREN ZONE OF THE NORTHERN APPALACHIAN COALFIELD.** By I. C. White. E. & M. J., vol. 87, p. 509. 1½ columns.
- THE NORTHERN APPALACHIAN COALFIELD.** By R. N. Hosler. E. & M. J., vol. 89, p. 1122. 8½ columns.
- THE COAL-FIELDS OF THE UNITED STATES.** By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- THE PROSPECTS OF THE LAKE SUPERIOR MINING REGION.** By W. H. Stevens. Min. Mag., vol. 2, p. 149. 4 pages.
- THE COPPER VEINS OF THE SOUTH.** By O. M. Lieber. Min. Mag., vol. 7, p. 367. 4 pages.
- COPPER DEPOSITS IN THE WESTERN FOOTHILLS OF THE SIERRA NEVADA.** By W. Forstner. Min. & Sci. Press, vol. 96, p. 743. 10½ columns. I.
- SEARCH FOR DIAMONDS ON THE PACIFIC COAST.** Min. & Sci. Press, vol. 22, p. 358. 1 column.
- ECONOMIC GEOLOGY OF THE FELDSPAR DEPOSITS OF THE UNITED STATES.** By E. S. Bastin. U. S. G. S., Bull. 420. 85 pages. I. 1910.
- GLASS SAND OF THE MIDDLE MISSISSIPPI BASIN.** By E. F. Burchard. U. S. G. S., Bull. 285, p. 459. 14 pages. 1905.
- RECONNAISSANCE OF SOME GOLD AND TIN DEPOSITS OF THE SOUTHERN APPALACHIANS.** By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.
- EXAMINATIONS AND EXPLORATIONS ON THE GOLD-BEARING BELTS OF THE ATLANTIC STATES.** Min. Mag., vol. 2, p. 378, 10½ pages, I.; vol. 3, p. 161, 7½ pages.
- GRANITES OF THE SOUTHEASTERN ATLANTIC STATES.** By T. L. Watson. U. S. G. S., Bull. 426. 282 pages. I.
- THE FLAKE GRAPHITE INDUSTRY IN THE UNITED STATES.** By F. D. Chester. E. & M. J., vol. 88, p. 785. 2 columns.

- IRON ORE SUPPLY OF THE UNITED STATES.** By C. W. Hayes. Min. & Sci. Press, vol. 98, p. 798. 3 columns.
- IRON OCCURRENCES IN THE EASTERN HALF OF THE UNITED STATES.** E. & M. J., vol. 90, p. 206. 2½ columns. Map.
- IRON ORES EAST OF THE MISSISSIPPI RIVER.** By J. Birkinbine. U. S. G. S., Mineral Resources, 1886, vol. 8. 65 pages.
- CHRONOLOGY OF LEAD-MINING IN THE UNITED STATES.** By W. R. Ingalls. T. A. I. M. E., vol. 38, p. 644. 12 pages.
- THE GEOLOGY OF THE UPPER MISSISSIPPI LEAD REGION.** By J. V. Phillips. Min. Mag., vol. 2, p. 129. 9½ pages. I.
- GEOGRAPHIC DISTRIBUTION OF LEAD AND ZINC DEPOSITS OF THE MISSISSIPPI VALLEY.** By C. R. Keyes. E. & M. J., vol. 86, p. 1004. 3 columns.
- MANGANESE DEPOSITS OF THE UNITED STATES.** By E. C. Harder. U. S. G. S., Bull. 380, p. 255. 22 pages. I. 1908.
- MANGANESE DEPOSITS OF THE UNITED STATES, WITH SECTIONS ON FOREIGN DEPOSITS, CHEMISTRY AND USES.** By E. C. Harder. U. S. G. S., Bull. 427. 208 pages. I.
- See also MISCELLANEOUS DISTRICTS.
- USEFUL MINERALS OF UNITED STATES.** U. S. G. S., Mineral Resources, 1882, vol. 17. 13 pages.
- USEFUL MINERALS IN UNITED STATES.** By A. Williams. U. S. G. S., Mineral Resources, 1887. 125 pages.
- MINOR MINERALS OF PACIFIC COAST.** By C. G. Yale. U. S. G. S., Mineral Resources, 1882, vol. 17. 2 pages.
- PEAT.** By H. H. Hindshaw. U. S. G. S., Mineral Resources, 1904.
- PEAT DEPOSITS.** By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 4. 9 pages.
- OIL INDUSTRY OF THE UNITED STATES.** Min. & Sci. Press, vol. 96, p. 202. 5½ columns.
- THE PETROLEUM FIELDS OF THE UNITED STATES.** By W. G. Burroughs. E. & M. J., vol. 89, p. 921. 11 columns. I.
- PHOSPHATE DEPOSITS OF UNITED STATES.** By F. B. Van Horn. Min. & Sci. Press, vol. 99, p. 88. 5 columns.
- PHOSPHATE DEPOSITS IN WESTERN UNITED STATES.** By F. B. Weeks and W. F. Ferrier. U. S. G. S., Bull. 315, p. 449. 14 pages. I. 1906.
- PHOSPHATE DEPOSITS IN THE WESTERN UNITED STATES.** By F. B. Weeks. U. S. G. S., Bull. 340, p. 441. 6½ pages. 1907.
- See also MISCELLANEOUS DISTRICTS.
- PLATINUM IN THE UNITED STATES.** By D. T. Day. Min. & Sci. Press, vol. 100, p. 582. ½ column.
- THE PACIFIC COAST BEACH SANDS.** By C. Bartlett. M. & M., vol. 30, p. 375. 3½ columns.
- USEFUL MINERALS IN BLACK SANDS OF PACIFIC COAST.** By D. T. Day and R. H. Richards. U. S. G. S., Mineral Resources, 1905. 73 pages.
- SILVER-LEAD MINES OF THE UNITED STATES.** E. & M. J., vol. 85, p. 374. 1 column.
- THE PRODUCTION OF SLATE IN THE UNITED STATES.** Min. & Sci. Press, vol. 95, p. 467. ½ column.
- FIELD-INVESTIGATIONS OF STRUCTURAL MATERIALS BY THE U. S. GEOLOGICAL SURVEY.** By E. F. Burchard. T. A. I. M. E., vol. 41, p. 490. 4½ pages.
- A NEW SOURCE OF SUPPLY OF SULPHUR.** T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- TIN DEPOSITS OF THE SOUTHERN APALACHIANS.** By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.
- See also MISCELLANEOUS DISTRICTS.

Utah

- A GAZETTEER OF UTAH. By H. Gannett. U. S. G. S., Bull. 166. 43 pages. Map. 1900.
- MINERAL RESOURCES OF UTAH. By R. H. Bradford. Min. & Sci. Press, vol. 98, p. 187. 5½ columns. Map.
- ANTIMONY IN SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 340, p. 253. 4 pages. 1907.
- ARSENIC MANUFACTURE AT MIDVALE, UTAH. By L. A. Palmer. M. & M., vol. 30, p. 641. 7 columns. I.
- COAL BEDS OF PLEASANT VALLEY, UTAH. E. & M. J., vol. 85, p. 964. ½ column
- THE PLEASANT VALLEY COAL DISTRICT, CARBON AND EMERY COUNTIES, UTAH. By J. A. Taff. U. S. G. S., Bull. 316, p. 338. 21 pages. I. 1906.
- COAL FIELDS OF NORTHWESTERN COLORADO AND NORTHEASTERN UTAH. By H. S. Gale. U. S. G. S., Bull. 341, p. 283. 35 pages. I. 1907.
- COAL FIELDS OF NORTHWESTERN COLORADO AND NORTHEASTERN UTAH. By H. S. Gale. U. S. G. S., Bull. 415. 265 pages. I. 1910.
- NOTES ON THE WEBER RIVER COAL FIELD, UTAH. By J. A. Taff. U. S. G. S., Bull. 285, p. 285. 4 pages. 1905.
- COAL IN SANPETE COUNTY, UTAH. By G. B. Richardson. U. S. G. S., Bull. 285, p. 280. 7 pages. I. 1905.
- THE HOMINY, COLOB, AND KANAB COAL FIELDS, SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 341, p. 379. 22 pages. I. 1907.
- BOOK CLIFFS COAL FIELD, UTAH, WEST OF GREEN RIVER. By J. A. Taff. U. S. G. S., Bull. 285, p. 289. 14 pages. I. 1905.
- CONSOLIDATED FUEL COMPANY, UTAH. By R. J. Turner. M. & M., vol. 31, p. 385. 4 columns. I.
- THE UTAH COPPER MINE. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 516. 9½ columns. I.
- OPERATIONS OF THE UTAH COPPER COMPANY DURING 1908. By D. C. Jackling. E. & M. J., vol. 87, p. 1185. 11½ columns. I.
- THE SOUTH UTAH MINE AND MILL. By L. A. Palmer. M. & M., vol. 31, p. 592. 8½ columns. I.
- THE BOSTON CONSOLIDATED MINING COMPANY, UTAH. E. & M. J., vol. 85, p. 257. 3 columns.
- BOSTON CONSOLIDATED, BINGHAM, UTAH. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 553. 7 columns. I.
- ORE OCCURRENCE AT FORTUNA MINE, BINGHAM, UTAH. By E. R. Zalinski. E. & M. J., vol. 86, p. 1191. 14 columns. I.
- AMATRICE, A NEW GEM STONE OF UTAH. By E. R. Zalinski. E. & M. J., vol. 87, p. 1038. 6 columns.
- MINING IN THE TINTIC DISTRICT OF UTAH. By L. A. Palmer. M. & M., vol. 31, p. 553. 8 columns. I.
- MINES AND MILL OF THE CONSOLIDATED MERCUR COMPANY. By R. H. Allen. E. & M. J., vol. 89, p. 1273. 13½ columns. I.
- SUPPOSED DEPOSITS OF GRAPHITE NEAR BRIGHAM, UTAH. By H. S. Gale. U. S. G. S., Bull. 430, p. 639. 2 pages. 1909.
- THE IRON COUNTY COAL FIELD, UTAH. By W. T. Lee. U. S. G. S., Bull. 316, p. 359. 20 pages. I. 1906.
- THE IRON ORES OF THE IRON SPRINGS DISTRICT, SOUTHERN UTAH. By C. K. Leith. U. S. G. S., Bull. 338, 102 pages. I. 1908.
- MARBLE OF WHITE PINE COUNTY, NEVADA, NEAR GANDY, UTAH. By N. H. Darton. U. S. G. S., Bull. 340, p. 377. 3 pages. 1907.
- OZOKERITE IN UTAH. By H. W. MacFarren. Min. & Sci. Press, vol. 99, p. 789. 2½ columns. I.
- OZOKERITE DEPOSITS IN UTAH. By J. A. Taff and C. D. Smith. U. S. G. S., Bull. 285, p. 369. 4 pages. 1905.

PETROLEUM IN SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 340, p. 343. 5 pages. 1907.

THE NEW OILFIELD IN UTAH. By A. P. Rogers. E. & M. J., vol. 87, p. 989. 2½ columns. I.

PHOSPHATE DEPOSITS EAST OF OGDEN, UTAH. By E. Blackwelder. U. S. G. S., Bull. 430, p. 536. 15 pages. I. 1909.

PARK CITY, UTAH. Min. & Sci. Press, vol. 100, p. 793. 4 columns. I.

THE COVE CREEK SULPHUR BEDS, UTAH. By W. T. Lee. U. S. G. S., Bull. 315, p. 485. 5 pages. 1906.

Venezuela

PETROLEUM IN VENEZUELA. E. & M. J., vol. 90, p. 506. 1½ columns.

PETROLEUM INDUSTRY, VENEZUELA. M. & M., vol. 31, p. 158. 1½ columns.

THE GRAN PROBRE SILVER MINE IN VENEZUELA. By C. Kissler. Min. Mag., vol. 2, p. 121. 4 pages.

Vermont

THE GRANITES OF VERMONT. By T. N. Dale. U. S. G. S., Bull. 404. 138 pages. I. 1909.

THE SLATE QUARRIES OF VERMONT. By C. S. Richardson. Min. Mag., vol. 2, p. 271. 12 pages.

TALC AND SOAPSTONE IN VERMONT. By G. H. Perkins. E. & M. J., vol. 86, p. 753. 2½ columns.

Virginia

GAZETTEER OF VIRGINIA. By H. Gannett. U. S. G. S., Bull. 232. 159 pages. 1904.

THE VIRGINIA BARITE-DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

THE POCKET COAL DISTRICT, VIRGINIA, IN THE LITTLE BLACK MOUNTAIN COAL FIELD. By C. A. Fisher. U. S. G. S., Bull. 341, p. 409. 10 pages. I. 1907.

THE RUSSELL FORK COAL FIELD, VIRGINIA. By R. W. Stone. U. S. G. S., Bull. 316, p. 55. 14 pages. I. 1906.

SALT AND GYPSUM OF THE PRESTON VALLEY OF THE HOLSTON RIVER, VIRGINIA. By H. D. Rogers. Min. Mag., vol. 4, p. 28. 7 pages.

THE IRON ORES OF THE APPALACHIAN REGION IN VIRGINIA. By E. C. Harder. U. S. G. S., Bull. 380, p. 215. 40 pages. I. 1908.

THE PRIDEVALE IRON COMPANY'S MINES, VIRGINIA. By W. B. Rogers. Min. Mag., vol. 3, p. 489. 8½ pages; vol. 5, p. 397. 14 pages. I. Map.

MANGANESE DEPOSITS OF VIRGINIA. By S. M. Ball. E. & M. J., vol. 87, p. 1056. 1½ columns.

MANGANESE DEPOSITS OF THE BLUE RIDGE, VIRGINIA. By L. G. Lockey. E. & M. J., vol. 89, p. 867. 1 column.

NICKEL IN SOME VIRGINIA IRON-ORES. T. A. I. M. E., vol. 39, p. 547. 2 pages.

THE OCCURRENCE OF NICKEL IN VIRGINIA. By T. L. Watson. T. A. I. M. E., vol. 38, p. 683. 16 pages. I.

THE VIRGINIA RUTILE DEPOSITS. By T. L. Watson and S. Taber. U. S. G. S., Bull. 430, p. 200. 14 pages. I. 1909.

RUTILE DEPOSITS OF VIRGINIA. Min. & Sci. Press, vol. 98, p. 896. 1½ columns.

SALT OF THE PRESTON VALLEY, VIRGINIA. By H. D. Rogers. Min. Mag., vol. 4, p. 28. 7 pages.

IRON AND ZINC IN SOUTHWESTERN VIRGINIA. E. & M. J., vol. 86, p. 908. 3 columns. I.

LEAD AND ZINC ORES OF VIRGINIA. By M. M. Caldwell. M. & M., vol. 30, p. 269. 2 columns.

Washington

CEMENT RESOURCES OF WASHINGTON. By H. Landes. U. S. G. S., Bull. 285, p. 377. 8 pages. 1905.

- THE COAL RESOURCES OF WASHINGTON.** By R. P. Tart. M. & M., vol. 30, p. 17, 6 columns, I.; p. 108, 6 columns, I.; p. 155, 7 columns, I., p. 311, 8 columns, I.
- MINES IN REPUBLIC DISTRICT, WASHINGTON.** By W. A. Scott. Min. & Sci. Press, vol. 101, p. 200. 4 columns. I.
- GOLD-BEARING RIVER SANDS OF NORTHEASTERN WASHINGTON.** By A. J. Collier. U. S. G. S., Bull. 315, p. 56. 15 pages. 1906.
- TIN ORE AT SPOKANE, WASHINGTON.** By A. J. Collier. U. S. G. S., Bull. 340, p. 295. 12 pages. I. 1907.
- TUNGSTEN ORE IN WASHINGTON.** By A. Wolf. M. & M., vol. 31, p. 307. 2 columns.
- NOTES ON TUNGSTEN DEPOSITS NEAR DEER PARK, WASHINGTON.** By H. Bancroft. U. S. G. S., Bull. 430, p. 214. 3 pages. 1909.
- West Indies**
- A GAZETTEER OF CUBA.** By H. Gannett. U. S. G. S., Bull. 192. 113 pages. I. 1902.
- A GAZETTEER OF PORTO RICO.** By H. Gannett. U. S. G. S., Bull. 183. 51 pages. 1901.
- MINING IN THE PROVINCE OF ORIENTE, CUBA.** By W. T. Grey. E. & M. J., vol. 89, p. 1235. 1 column.
- NOTES ON SOME ORE DEPOSITS OF PORTO RICO.** By S. H. Hamilton. E. & M. J., vol. 88, p. 518. 4 columns. I.
- HISTORY OF GOLD MINING IN PORTO RICO.** Min. & Sci. Press, vol. 97, p. 96, 5½ columns; p. 126, 7½ columns. I.
- MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD.** By J. C. T. Raspas. T. I. M. E., vol. 36, p. 119. 5 pages.
- BARITE ASSOCIATED WITH IRON-ORE IN PINAR DEL RIO PROVINCE, CUBA.** By C. Catlett. T. A. I. M. E., vol. 38, p. 358. 1½ pages.
- CHARACTER OF THE CUBAN COPPER MINES.** J. C. M. I., vol. 13, p. 97. 2½ pages.
- "TWO CUBAN MINES": Copper.** By B. B. Lawrence. J. C. M. I., vol. 13, p. 91. 18 pages. I.
- EL COBRE COPPER MINE.** By B. B. Lawrence. M. & M., vol. 31, p. 235. 10½ columns. I.
- EL COBRE MINES, CUBA.** By E. G. Tuttle. M. & M., vol. 31, p. 449. 11 columns. I.
- COPPER ORES IN PORTO RICO.** E. & M. J., vol. 88, p. 518. ½ column.
- CUBAN GOLD MINES.** By E. B. Wilson. M. & M., vol. 31, p. 240. 1 column.
- CUBAN GOLD MINING.** By E. W. Dennison. Min. & Sci. Press, vol. 97, p. 500. ½ column.
- GOLD MINING IN PORTO RICO.** By W. B. McKinlay. Min. & Sci. Press, vol. 97, p. 96, 5½ columns; p. 126, 7½ columns, I.
- IRON ORES OF SANTIAGO, CUBA.** By E. B. Wilson. M. & M., vol. 31, p. 245. 8½ columns. I.
- THREE DEPOSITS OF IRON ORE IN CUBA.** By A. C. Spencer. U. S. G. S., Bull. 340, p. 318. 12 pages. I. 1907.
- THE RESIDUAL BROWN IRON-ORES OF CUBA.** By C. M. Weld. T. A. I. M. E., vol. 40, p. 299. 13½ pages. I.
- West Virginia**
- GAZETTEER OF WEST VIRGINIA.** By H. Gannett. U. S. G. S., Bull. 233. 164 pages. 1904.
- NOTES ON THE COAL INDUSTRY IN WEST VIRGINIA.** By R. B. Brinsmade. E. & M. J., vol. 90, p. 775. 4½ columns.
- UPPER POTOMAC COAL FIELDS, WEST VIRGINIA.** By H. H. Stock. M. & M., vol. 30, p. 201. 8 columns. I.
- COAL MINING IN CENTRAL WEST VIRGINIA.** By F. W. Parsons. E. & M. J., vol. 87, p. 1284. 16 columns. I.

COAL FIELDS OF CENTRAL WEST VIRGINIA. By H. H. Stock. M. & M., vol. 30, p. 188. 10 columns. I.

COAL FIELDS OF WEST VIRGINIA. By H. H. Stock. M. & M., vol. 29, p. 219, 6½ columns, I.; p. 283, 7½ columns, I. and Map; p. 303, 8½ columns, I.; p. 509, 11½ columns. I.

THE KANAWHA REGION, WEST VIRGINIA. By H. H. Stock. M. & M., vol. 30, p. 36, 9 columns, I.; p. 70, 8½ columns, I.

COAL MINING IN KANAWHA VALLEY, WEST VIRGINIA. By S. M. Buck. U. S. G. S., Mineral Resources, 1883 and 1884.

CORRELLATION THACKER FIELD, WEST VIRGINIA. By A. H. Stow. M. & M., vol. 31, p. 83. 4½ columns. I.

A SKETCH OF THE MINES AND COPPER REGION OF SOUTHWESTERN VIRGINIA. By W. J. March. Min. Mag., vol. 9, p. 217. 3½ pages.

THE GLASS-SAND INDUSTRY IN EASTERN WEST VIRGINIA. By G. W. Stose. U. S. G. S., Bull. 285, p. 473. 3 pages. 1905.

WEST VIRGINIA OIL AND GAS NOTES. E. & M. J., vol. 90, p. 823. 4½ columns.

OIL FIELD AT FOLLANSBEE, WEST VIRGINIA. By F. W. Brady. M. & M., vol. 29, p. 207. 4½ columns. I.

NOTES FROM THE OIL FIELDS. By F. W. Brady. M. & M., vol. 30, p. 156. 3½ columns. I.

Wisconsin

COPPER IN SOUTHWESTERN WISCONSIN. By G. H. Cox. Min. & Sci. Press, vol. 99, p. 592. 1½ columns. I.

THE PENOKEE IRON-BEARING SERIES OF MICHIGAN AND WISCONSIN. By R. D. Irving and C. R. Van Hise. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 341-507. 1888-89. I.

THE IRON ORES OF WISCONSIN. By E. Daniels. Min. Mag., vol. 10, p. 13. 12 pages.

THE EMPIRE-ENTERPRISE ZINC MINES, WISCONSIN. By H. C. George. E. & M. J., vol. 89, p. 1280. 6½ columns. I.

THE LEAD VEINS OF WISCONSIN. Min. Mag., vol. 2, p. 493. 11½ pages.

Wyoming

GEOLOGY AND MINERAL RESOURCES OF THE LARAMIE BASIN, WYOMING. By N. H. Darton and C. E. Siebenthal. U. S. G. S., Bull. 364. 81 pages. I. 1909.

THE ASBESTOS INDUSTRY IN CENTRAL WYOMING. By F. H. Barrow. E. & M. J., vol. 90, p. 559. 3 columns. I.

ASBESTOS IN WYOMING. By H. C. Beeler. E. & M. J., vol. 90, p. 955. 2½ columns. I.

BENTONITE OF THE LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 445. 4 pages. 1905.

PORTLAND CEMENT MATERIALS IN EASTERN WYOMING. By O. H. Ball. U. S. G. S., Bull. 315, p. 232. 12 pages. I. 1906.

THE THICKEST COAL SEAM: Wyoming. E. & M. J., vol. 86, p. 1169. ¼ column.

A MODEL COAL MINING PLANT IN WYOMING. By H. M. Payne. E. & M. J., vol. 90, p. 224. 8½ columns. I.

COAL AND OIL IN SOUTHERN UINTA COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.

THE WESTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball. U. S. G. S., Bull. 341, p. 243. 12½ pages. I. 1907.

THE EASTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball and E. Stebiner. U. S. G. S., Bull. 381, p. 186. 28 pages. I. 1908.

- THE NORTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 341, p. 256. 27 pages. I. 1907.
- THE SOUTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 381, p. 214. 68 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA. By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- COAL FIELDS OF THE SOUTHWEST SIDE OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 341, p. 200. 18 pages. I. 1907.
- THE COAL FIELD IN THE SOUTHEASTERN PART OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 381, p. 170. 16 pages. I. 1908.
- COAL FIELDS OF EAST-CENTRAL CARBON COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 316, p. 244. 16 pages. I. 1906.
- COAL FIELDS IN A PORTION OF CENTRAL UINTA COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 316, p. 212. 30 pages. I. 1906.
- THE BUFFALO COAL FIELD, WYOMING. By H. S. Gale and C. H. Wegemann. U. S. G. S., Bull. 381, p. 137. 32 pages. I. 1908.
- THE EASTERN PART OF THE GREAT DIVIDE BASIN COAL FIELD, WYOMING. By E. E. Smith. U. S. G. S., Bull. 341, p. 220. 23 pages. I. 1907.
- THE POWDER RIVER COAL FIELD, WYOMING, ADJACENT TO THE BURLINGTON RAILROAD. By R. W. Stone and C. T. Lupton. U. S. G. S., Bull. 381, p. 115. 22 pages. I. 1908.
- COAL OF LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 316, p. 261. 3 pages. 1906.
- COAL AND OIL IN SOUTHERN UINTA COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE SHERIDAN COAL FIELD, WYOMING. By J. A. Taff. U. S. G. S., Bull. 341, p. 123. 14 pages. 1907.
- GEOGRAPHY AND GEOLOGY OF A PORTION OF SOUTHWESTERN WYOMING, WITH SPECIAL REFERENCE TO COAL AND OIL. By A. C. Veatch. U. S. G. S., Professional Paper 56. 178 pages. I. 1907.
- THE COAL MINES OF SOUTHERN WYOMING. By F. W. Parsons. E. & M. J., vol. 85, p. 118. 6½ columns. I.
- THE DIAMONDVILLE COALFIELD, WYOMING. By A. T. Shurick. E. & M. J., vol. 85, p. 116. 6 columns. I.
- THE GLENROCK COAL FIELD, WYOMING. By E. W. Shaw. U. S. G. S., Bull. 341, p. 151. 14 pages. I. 1907.
- THE LANDER COAL FIELD, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 316, p. 242. 2 pages. 1906.
- COPPER DEPOSITS OF THE HARTVILLE UPLIFT, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 93. 14 pages. 1906.
- LAKE CREEK, WYOMING, A NEW MINING DISTRICT. By W. Benton. E. & M. J., vol. 86, p. 36. 1 column.
- GOLD DEVELOPMENTS IN CENTRAL UINTA COUNTY, WYOMING, AND AT OTHER POINTS ON SNAKE RIVER. By A. R. Schultz. U. S. G. S., Bull. 315, p. 71. 18 pages. I. 1906.
- WIND RIVER PLACERS, WYOMING. By J. H. Hastings. Min. & Sci. Press, vol. 98, p. 864. 1 column.
- GRAPHITE IN THE HAYSTACK HILLS, LARAMIE COUNTY, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 426. 2 pages. 1906.
- GYPSUM DEPOSITS OF THE LARAMIE DISTRICT, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 404. 2 pages. 1905.

- THE HARTVILLE IRON-ORE RANGE, WYOMING.** By S. H. Ball. U. S. G. S., Bull. 315, p. 190. 15½ pages. I. 1906.
- TITANIFEROUS IRON ORE OF IRON MOUNTAIN, WYOMING.** By S. H. Ball. U. S. G. S., Bull. 315, p. 206. 7 pages. 1906.
- MICA IN THE HARTVILLE UPLIFT, WYOMING.** By S. H. Ball. U. S. G. S., Bull. 315, p. 423. 3 pages. 1906.
- THE LABARGE OIL FIELD, CENTRAL UTAH COUNTY, WYOMING.** By A. R. Schultz. U. S. G. S., Bull. 340, p. 364. 9 pages. I. 1907.
- PLATINUM IN RAMBLER MINE, WYOMING.** By J. F. Kemp. U. S. G. S., Mineral Resources, 1902. 7 pages.
- PRELIMINARY REPORT ON THE PHOSPHATE DEPOSITS IN SOUTHEASTERN IDAHO AND ADJACENT PARTS OF WYOMING AND UTAH.** By H. S. Gale and R. W. Richards. U. S. G. S., Bull. 430, p. 457. 82 pages. I. 1909.
- THE SALT RESOURCES OF THE IDAHO-WYOMING BORDER, WITH NOTES ON THE GEOLOGY.** By C. L. Berger. U. S. G. S., Bull. 430, p. 555. 15 pages. 1909.
- DEPOSITS OF SODIUM SALTS IN WYOMING.** By A. R. Schultz. U. S. G. S., Bull. 430, p. 570. 19 pages. I. 1909.
- SULPHUR DEPOSITS NEAR THERMOPOLIS, WYOMING.** By E. G. Woodruff. U. S. G. S., Bull. 380, p. 373. 8 pages. I. 1908.
- SULPHUR DEPOSITS AT CODY, WYOMING.** By E. G. Woodruff. U. S. G. S., Bull. 340, p. 451. 6 pages. I. 1907.

MINE DRAINAGE

Drainage in General

- CURRENT PUMPS FOR MINING.** By F. Reed. M. & M., vol. 30, p. 653. 3½ columns. I.
- DIVERTING WATER IN A WET SHAFT.** By A. D. Cox. M. & M., vol. 30, p. 415. ¾ column. I.
- PUMPING DURING SHAFT SINKING.** M. & M., vol. 30, p. 404. 5 columns. I.
- See also **SHAFT SINKING.**
- THE DRAINAGE OF THE NEW CHUM LINE OF REEF.** By F. G. Buckell. T. A. I. M. E., vol. 8, pt. 2, p. 250. 4 pages. Map. D.
- DRAINAGE IN THE JOPLIN REGION, MISSOURI:** Shadow streams, etc. T. A. I. M. E., vol. 38, p. 327. 2 pages.
- PUMPING PROBLEMS OF THE JOPLIN DISTRICT.** By D. Brittain. E. & M. J., vol. 86, p. 214. 10½ columns. I.
- MINE DRAINAGE IN JOPLIN DISTRICT.** By L. L. Wittich. M. & M., vol. 30, p. 535. 5½ columns. I.
- STORM WATER DRAINS AND DATA.** By J. B. Balcomb. J. W. Soc. E., vol. 15, p. 699. 40 pages. I.
- TAPPING MINE WATER UNDER PRESSURE.** E. & M. J., vol. 86, p. 230. 1 column.
- See also **USE OF BORE HOLES.**
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- LEINWEBER METHOD OF EXTRACTING OIL FROM WELLS.** By F. A. Talbot. E. & M. J., vol. 89, p. 1270. 4 columns. I.
- DETERMINING HEIGHT OF WATER IN INACCESSIBLE OPEN PIT.** By B. H. Case. E. & M. J., vol. 85, p. 301. 1½ columns. I.

THE DISCHARGE OF SEWAGE INTO TIDAL WATERS. By G. A. Soper. Sch. Mines Quart., vol. 30, p. 239. 12½ pages.

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Pumps for Mine Use

REVIEW OF PAST AND PRESENT STEAM PUMPING AT MINES. By J. Tipping. T. Au. I. M. E., vol. 2, p. 31. 19½ pages.

METHODS OF PUMPING DEEP GROUND WATERS. By C. B. Burdick. J. W. Soc. E., vol. 12, p. 719. 37 pages. I.

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PUMPING AT BISBEE, ARIZONA. By C. C. Austin. M. & M., vol. 31, p. 132. 4 columns. I.

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THE OLD DOMINION PUMPING SYSTEM. By R. L. Herrick. M. & M., vol. 31, p. 324. 6 columns. I.

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PUMPING PLANT AT THE TOMBSTONE CONSOLIDATED. By E. W. Walker. E. & M. J., vol. 88, p. 160. 5½ columns. I.

AN URGENT PUMPING PROBLEM AND HOW IT WAS SOLVED. By J. A. Seager. E. & M. J., vol. 88, p. 509. 2½ columns. I.

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LOWERING A LARGE PUMP INTO A MINE. By G. J. Young. E. & M. J., vol. 87, p. 806. 2½ columns. I.

THE SINKING PUMP AND ITS TROUBLES. By M. T. Hoster. E. & M. J., vol. 89, p. 601. 2½ columns. I.

See also **SHAFT SINKING.**

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WATER RINGS IN THE FILBERT SHAFT, PENNSYLVANIA. M. & M., vol. 30, p. 560. ¼ column. I.

WATER-RINGS FOR CIRCULAR SHAFTS. T. I. M. E., vol. 38, p. 25. ¼ page.

Rotary Pumps

CENTRIFUGAL PUMPS. By W. R. Wiley. J. W. Soc. E., vol. 15, p. 228. 36 pages. I.

KINEMATICS OF ONE FORM OF ROTARY PUMP OR BLOWER. By S. W. Balch. Sch. Mines Quart., vol. 30, p. 21. 6 pages. I.

THE DESIGN OF CENTRIFUGAL PUMPS. By J. A. Seager. E. & M. J., vol. 90, p. 1216. 6 columns. I.

CENTRIFUGAL PUMP EFFICIENCY. By V. V. Messer. Min. & Sci. Press, vol. 98, p. 696. 4½ columns. I.

EFFICIENCY OF CENTRIFUGAL PUMPS. By F. W. Kerns. Min. & Sci. Press, vol. 100, p. 862. 2½ columns.

MOTOR DRIVEN CENTRIFUGAL PUMP FOR MINE USE. By C. Robinson. E. & M. J., vol. 87, p. 404. 3½ columns. D.

MINE PUMPING WITH DIRECT CONNECTED ELECTRICALLY DRIVEN TURBINE PUMPS. By P. H. Moore. J. M. Soc. N. S., vol. 12, p. 1. 8½ pages.

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THE LEA-DEGEN TURBINE PUMP. E. & M. J., vol. 86, p. 1005. 2 columns. I.

INSTALLATION AND USE OF TURBINE PUMPS. By M. S. Hachita. Coal Mining Supplement, E. & M. J., vol. 88, p. 22. 8½ columns. I.

Cornish Pumps

CORNISH PUMPS. Min. & Sci. Press, vol. 97, p. 46, 4½ columns, I.; p. 83, 3 columns; p. 179, 4 columns. D.

CORNISH PUMPS AND PUMPING ENGINES. By H. F. Collins. Min. & Sci. Press, vol. 98, p. 289, 3½ columns; p. 317, 4½ columns. D.

COMPOUND CORNISH PUMPING ENGINES. By W. P. Gauvain. Min. & Sci. Press, vol. 99, p. 62. 5½ columns. Diagrams.

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Hydraulic Pumps

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THE SIPHON IN MINING. By J. T. Beard. M. & M., vol. 31, p. 427. 4½ columns. I.

PUMPING AND SIPHONING HOT WATER. By J. T. Beard. M. & M., vol. 31, p. 663. 3 columns. I.

Compressed Air Pumping

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AIR-LIFT PUMP EMPLOYED IN UNWATERING MINE AFTER MINE FIRE. E. & M. J., vol. 85, p. 640. 4 columns. I.

DIRECT AIR-PRESSURE PUMPING. Min. & Sci. Press, vol. 96, p. 819. 2½ columns. I.

AIR LIFT PUMPING. By E. A. Rix. Min. & Sci. Press, vol. 101, p. 505. 4 columns. Tables.

EFFICIENCY OF THE AIR LIFT AS A SOLUTION PUMP. By L. M. Green. E. & M. J., vol. 88, p. 251. 13½ columns. I.

NOTES ON THE POHLE AIR LIFT. By W. S. Anderson. E. & M. J., vol. 89, p. 256. 2½ columns.

RAISING LIQUIDS BY COMPRESSED AIR. E. & M. J., vol. 87, p. 646. ½ column. I.

THE ECONOMIC USE OF COMPRESSED AIR IN THE ELEVATION OF TAILINGS. By J. W. Archibald. T. Au. I. M. E., vol. 8, pt. 1, p. 103. 4½ pages.

UNWATERING SHAFT BY COMPRESSED AIR. By L. Boudoire. E. & M. J., vol. 90, p. 848. 1½ columns. I.

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THE VACUUM-PUMP IN THE CYANIDING OF SAND. By W. A. Caldecott. Min. & Sci. Press, vol. 98, p. 316. 1½ columns.

THE USE OF THE VACUUM PUMP IN THE CYANIDING OF SAND. P. C. M. & M. Soc. S. A., vol. 9, p. 240. 2 columns.

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ELECTRICALLY DRIVEN MINE PUMPS. By S. F. Walker. E. & M. J., vol. 87, p. 422. 4 columns.

ELECTRICAL MINE-PUMPS IN EUROPE. By A. S. Atkinson. Min. & Sci. Press, vol. 99, p. 334. 4 columns.

EXPERIMENTS WITH TWO ELECTRICALLY-DRIVEN PUMPS. By T. L. Galloway. T. I. M. E., vol. 36, p. 82. 11 pages.

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Bailing Water

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WATER TANK AND COUNTERWEIGHT USED AT THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 391. $\frac{1}{2}$ column. I.

HOISTING MINE WATER. E. & M. J., vol. 87, p. 1281. $3\frac{1}{2}$ columns.

See also **HOISTING IN MINING.**

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Unwatering Shafts

UNWATERING THE MEXIAMORA MINE AT GUANAJUATO. By F. H. Clark. E. & M. J., vol. 89, p. 271. $4\frac{1}{2}$ columns. I.

UNWATERING FLOODED MINES. By D. Lamont. E. & M. J., vol. 90, p. 639. 3 columns.

RECLAIMING FLOODED DRIFT MINES IN ALASKA. By W. H. Lanagan. Min. & Sci. Press, vol. 100, p. 892. $6\frac{1}{2}$ columns. I.

Drainage Tunnels

COMSTOCK DRAINAGE PROBLEMS. By L. M. Hall. Min. & Sci. Press, vol. 99, p. 27. $5\frac{1}{2}$ columns. I.

CUSTOM TUNNELS FOR DRAINAGE AND TRANSPORTATION OF ORE. E. & M. J., vol. 85, p. 852. $2\frac{1}{2}$ columns.

THE ROOSEVELT DEEP DRAINAGE TUNNEL, COLORADO. By R. M. Bagg. E. & M. J., vol. 88, p. 1061. 5 columns. I.

THE LOS ANGELES AQUEDUCT TUNNEL WORK. Min. & Sci. Press, vol. 100, p. 681. $3\frac{1}{2}$ columns. I.

See also **TUNNELING.**

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Pipes and Pipe Fitting

CAPACITY OF PIPES. P. C. M. & M. Soc. S. A., vol. 9, p. 320. $\frac{1}{4}$ column.

TESTS OF CAST IRON REINFORCED CONCRETE CULVERT PIPE. By A. N. Talbot. J. W. Soc. E., vol. 13, p. 376. 58 pages. I.

FORGED-STEEL BOLTED PIPE CONNECTION. E. & M. J., vol. 85, p. 1195. $\frac{1}{2}$ column. I.

CONCRETE PIPE CULVERTS. By O. P. Chamberlain. J. W. Soc. E., vol. 12, p. 81. 19 pages. I.

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WOOD PIPES. M. & M., vol. 29, p. 322. 1 column.

ZOLLNERS' PATENT WATER PIPE. By F. D. Power. T. Au. I. M. E., vol. 5, p. 131. 7 pages. Table.

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DITCHES: Method of Calculating Sections and Construction for Mining Work. By D. Waterman. Min. & Sci. Press, vol. 98, p. 352. 8 columns. I. Diagrams.

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- THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. E. & M. J., vol. 90, p. 12. 2 columns.
- HISTORY OF THE ROCK DRILL. By W. L. Saunders. Min. & Sci. Press, vol. 100, p. 735. 2 columns.
- THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. M. & M., vol. 31, p. 18. 1½ columns.
- HISTORY OF THE WATER LEYNER DRILL. By C. A. Hirschberg. M. & M., vol. 31, p. 148. 2 columns.
- EVOLUTION OF WELL-DRILLING MACHINERY. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 676. 3½ columns.
- See also HISTORY OF MINING.
- CONTRACT FOR DRILLING. Min. & Sci. Press, vol. 99, p. 615. ½ column.

Hand Drills

- THE HAND DRILL IN PROSPECTING PLACER DEPOSITS. By J. P. Hutchins. E. & M. J., vol. 86, p. 1141. 13½ columns. I.
- HAND BORING BY THE VICTORIAN MINES DEPARTMENT. T. Au. I. M. E., vol. 7, p. 49. 7 pages. I.
- WEAR OF STEEL IN HAND DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 153. ½ column.
- NOTES ON HAMMER DRILL WORK AT THE GRANITE MINES, BRITISH COLUMBIA. By H. B. Williams. T. I. M. & M., vol. 19, p. 463. 5½ pages. I.
- HAND DRILLING IN ALLUVIUM. By E. K. Hall. Min. & Sci. Press, vol. 101, p. 118. 2 columns.
- HAND CHURN DRILLING. By O. H. Packer. Min. & Sci. Press, vol. 99, p. 296. 1½ columns.
- See also COST OF DRILLING AND BORING.

Machine or Power Drills

- NOTES ON THE CONSTRUCTION AND PRACTICAL OPERATION OF ROCK DRILLING MACHINES. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 6, p. 38, 20½ columns, I.; p. 118, 24½ columns, I.; p. 162, 11 columns; p. 193, 3 columns; p. 217, 11½ columns.
- NOTES ON SMALL STOPE DRILLS. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 8, p. 109. 23 columns, I.; p. 151, 2½ columns; p. 189, 1 column; p. 210, 20 columns; p. 270, 15 columns.
- AIR-DRILLS AND THEIR EFFICIENCY. By S. K. Patterson. Min. & Sci. Press, vol. 97, p. 467. 2½ columns.
- EFFECT OF HIGH AND LOW AIR PRESSURE IN OPERATING DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 216. 1 column.
- THE SCIENCE OF ECONOMICALLY MINING HARD GROUND WITH PRECUSSIVE ROCK DRILLS AND COMPRESSED AIR. By W. A. T. Davies. T. Au. I. M. E., vol. 11, p. 151. 13 pages. I.
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- DRILLING MACHINES. Min. & Sci. Press, vol. 20, p. 56. ½ column.
- MACHINE VS. HAND DRILLING IN SINKING ON THE RAND. By E. M. Weston. E. & M. J., vol. 85, p. 439. 10½ columns. I.
- MACHINE WORK VS. HAND DRILLING, SOUTH AFRICA. T. Au. I. M. E., vol. 5, p. 33. Tables.
- THE GORDON DRILL. E. & M. J., vol. 87, p. 468. ½ column. I.
- THE WALSKI HYDRAULIC ROCK DRILL. By F. A. Talbot. E. & M. J., vol. 89, p. 1278. 5 columns. I.

THE SCOTT GASOLINE ROCK DRILL. E. & M. J., vol. 86, p. 1008. $\frac{1}{2}$ column. I.

THE STEPHENS CLIMAX IMPERIAL HAMMER DRILL. By E. M. Weston. E. & M. J., vol. 87, p. 657. $3\frac{1}{2}$ columns. I.

MINE DRILLING IN THE HOG MOUNTAIN MINES, ALABAMA. T. A. I. M. E., vol. 39, p. 581. $\frac{2}{3}$ page.

MACHINE DRILLS FOR STOPING. By E. M. Weston. E. & M. J., vol. 85, p. 1002. $12\frac{1}{2}$ columns, I.; p. 1045, $8\frac{1}{2}$ columns, I.

DRIFTING WITH A STOPING DRILL. By H. E. Moon. M. & M., vol. 31, p. 697. $\frac{1}{2}$ column. I.

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DRILLS FOR STOPING. By A. Del Mar. Min. & Sci. Press, vol. 96, p. 169. 2 columns.

METHOD OF DRILLING AND ORDER OF BLASTING THE ROOSEVELT TUNNEL, COLORADO. E. & M. J., vol. 88, p. 1062. D.

FAILURE OF STOPE DRILLS ON THE RAND. E. & M. J., vol. 85, p. 110. $1\frac{1}{2}$ columns.

DUST COLLECTOR FOR ROCK DRILLS. E. & M. J., vol. 85, p. 957. $\frac{1}{2}$ column.

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Air-Hammer Drills

REQUISITES FOR AIR-HAMMER DRILL BITS. By G. E. Walcott. Min. & Sci. Press, vol. 101, p. 674. $1\frac{1}{2}$ columns. I.

THE MERITS AND DEMERITS OF AIR-HAMMER DRILLS. By G. E. Walcott. E. & M. J., vol. 85, p. 351. $8\frac{1}{2}$ columns. I.

THE DEVELOPMENT OF THE HAMMER DRILL. P. C. M. & M. Soc. S. A., vol. 8, p. 63. $2\frac{1}{2}$ columns.

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ROCK DRILL BITS. By T. H. Proske. Min. & Sci. Press, vol. 100, p. 347. $5\frac{1}{2}$ columns. I.

SELECTION AND USE OF BITS FOR POWER DRILLS. By M. De Cennes. E. & M. J., vol. 87, p. 1183. $4\frac{1}{2}$ columns. I.

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PROSPECT DRILLING IN THE JOPLIN DISTRICT. By O. Ruhl. M. & M., vol. 29, p. 6. 3½ columns. I.

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THE DRILL AS A MEANS OF TESTING FOR GRAVEL. Min. & Sci. Press, vol. 98, p. 721. 7 columns. I.

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OIL-WELL DRILLING IN CALIFORNIA. By W. R. Jewell. Min. & Sci. Press, vol. 101, p. 775. 3½ columns.

BRINGING IN A GUSHER. E. & M. J., vol. 90, p. 807. 1½ columns. I.

PROSPECT DRILLING FOR OIL IN MEXICO. Min. Mag., London, vol. 3, p. 283. 6 columns. I.

DRILLING FOR OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 613. 8½ columns. I.

PROSPECTING FOR COAL: Boring. Min. Mag., vol. 7, p. 258, 7½ pages; p. 463, 7½ pages.

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DRILLING IN ALLUVIAL GROUND IN ALASKA. By T. A. Rickard. Min. & Sci. Press, vol. 99, p. 558. 3½ columns. I.

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- A DIAMOND DRILL CORE SECTION OF THE MESABI ROCKS.** By N. H. Winchell. T. L. S. M. I., vol. 14, p. 156, 22 pages; vol. 15, p. 100, 42 pages, I.
- RECORD OF BOREHOLE No. 1 OF THE STANDARD COAL AND RAILWAY COMPANY, LIMITED, ABOUT ONE MILE NORTH OF HALFWAY RIVER LAKE, CUMBERLAND COUNTY, NOVA SCOTIA.** By R. H. Brown. J. M. Soc. N. S., vol. 10, p. 162. 6 pages.
- SAMPLING SLUDGE OF CHURN DRILLS.** E. & M. J., vol. 90, p. 851. 1 column.
- INACCURACIES OF CHURN DRILL SAMPLING.** By H. A. Field. E. & M. J., vol. 89, p. 953. 1 column.
- See also **METHODS OF SAMPLING, ETC.**
- DIAMOND DRILL REPORTS.** E. & M. J., vol. 90, p. 1147. ½ column. D.
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- CHURN DRILLING AT ELY, NEVADA.** M. & M., vol. 29, p. 81. ½ column.
- CHURN DRILLING IN ELY DISTRICT.** By J. L. Dobbins. M. & M., vol. 29, p. 526. 4 columns. I.
- DETAILS OF CHURN DRILL OPERATIONS AT SILVERBELL, ARIZONA.** By M. B. Gentry. E. & M. J., vol. 90, p. 850. 4½ columns. I.
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- THE CHURN-DRILL AS A MEANS FOR PROSPECTING.** By E. E. Carter. Min. & Sci. Press, vol. 96, p. 572. 1½ columns.
- CHURN DRILLING FOR BLASTING.** E. & M. J., vol. 88, p. 178. ¼ column.
- THE STEEL OIL DERRICK.** By R. B. Woodworth. P. E. Soc. W. Pa., vol. 25, p. 245. 67½ pages. I.
- STEEL DERRICKS AND DRILLING MACHINES.** Min. & Sci. Press, vol. 101, p. 259. 2 columns. I.
- DEVELOPMENT AND DESIGN OF THE STEEL OIL DERRICK.** By R. B. Woodworth. E. & M. J., vol. 88, p. 304. 16½ columns. I.
- See also **COST OF DRILLING AND BORING.**
- Churn Drills and Drilling**
- COMPLETE CHURN DRILL EQUIPMENT FOR PROSPECTING.** E. & M. J., vol. 90, p. 998. ¼ column. Table.
- DRILLING WITH BAMBOO RODS.** By W. A. Moller. T. I. M. E., vol. 36, p. 437. 6 pages. I.
- STEAM CHURN DRILL IN HOT AND COLD CLIMATES.** By J. P. Hutchins. E. & M. J., vol. 86, p. 218. 9 columns. I.
- ELECTRICALLY-DRIVEN WELL-DRILLER.** By J. V. Downie. Min. & Sci. Press, vol. 99, p. 269. 2½ columns. I.
- NEW DEVELOPMENTS IN WELL BORING AND IRRIGATION IN EASTERN SOUTH DAKOTA.** By N. H. Darton. U. S. G. S., 18th Ann. Rept., pt. 4, pp. 561-616, 1896-97. I.
- BORING: Prospect Work by Churn Drill.** Min. Mag., vol. 10, p. 451. 4½ pages.

Diamond and Rotary Drills

THE DIAMOND DRILL. Min. & Sci. Press, vol. 20, p. 17. $\frac{1}{2}$ column.

THE DIAMOND POINTED DRILL. Min. & Sci. Press, vol. 20, p. 296, 3 columns, I.; p. 311, 2 columns, I.

DIAMONDS FOR CUTTING AND DRILLING. Min. & Sci. Press, vol. 22, p. 246. $\frac{1}{2}$ column.

WEAR OF DIAMONDS IN DRILLING VARIOUS ROCKS. E. & M. J., vol. 89, p. 1100. $1\frac{1}{2}$ columns.

NOTE ON DIAMOND DRILLING. By C. M. Haight. Sch. Mines Quart., vol. 30, p. 98. $1\frac{1}{2}$ pages. I.

DIAMOND DRILLING NOTES IN KEWEE-NAW POINT. M. & M., vol. 31, p. 295. 1 column.

THE DIAMOND CORE-DRILL IN PROSPECTING. By L. T. Wright. Min. & Sci. Press, vol. 95, p. 461. $3\frac{1}{2}$ columns.

THE DIAMOND DRILL AT THE SMARTSVILLE TUNNEL. Min. & Sci. Press, vol. 22, p. 344. $1\frac{1}{2}$ columns.

DIAMOND DRILLING AT TONOPAH. By J. M. Fox. Min. & Sci. Press, vol. 99, p. 262. $5\frac{1}{2}$ columns. I.

DIAMOND DRILLING AT THE GRANBY MINES. J. C. M. I., vol. 11, p. 401. $\frac{1}{2}$ page.

THE DIAMOND DRILL IN THE ANTHRACITE FIELDS. By F. Lynde. E. & M. J., vol. 88, p. 258. 9 columns. I.

PROSPECTING WITH DIAMOND DRILLS IN MEXICAN MINES. E. & M. J., vol. 86, p. 313. $1\frac{1}{2}$ columns.

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DIAMOND DRILLING AT MAPINI. By J. F. Bennett. E. & M. J., vol. 85, p. 718. 3 columns. I.

DEEP DIAMOND-BORING AT BALFOUR MAINS, FIFESHIRE, GREAT BRITAIN. By J. G. Thompson. T. I. M. E., vol. 36, p. 574. 6 pages. I.

CALYX BORING BY THE VICTORIAN MINES DEPARTMENT. By S. Hunter. T. Au. I. M. E., vol. 7, p. 46. 3 pages. I.

DIAMOND DRILL, CALYX AND HAND BORING BY THE VICTORIAN MINES DEPARTMENT. By S. Hunter. T. Au. I. M. E., vol. 7, p. 23. 40 pages. I.

SOME NOTES ON "THE DAVIS CALYX DRILL." By Davis and Knapp. T. Au. I. M. E., vol. 3, p. 250. $5\frac{1}{2}$ pages. I.

USE OF THE TERRY CORE DRILL IN MINE OPERATIONS. E. & M. J., vol. 89, p. 1156. 6 columns. I.

DRILLING WITH ROTATED CASING. E. & M. J., vol. 86, p. 1142. $1\frac{1}{2}$ columns. I.

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THE WORLD'S DEEPEST BORE-HOLE. P. C. M. & M. Soc. S. A., vol. 7, p. 307. Note.

A DEEP DIAMOND DRILL HOLE. E. & M. J., vol. 87, p. 791. $1\frac{1}{2}$ columns.

A DEEP BORING AT HESWELL, CHESHIRE, AND ITS BEARING UPON UNDERGROUND GEOLOGY OF THE LIVERPOOL-WIRRAL AREAS. By A. Wade. T. I. M. E., vol. 39, p. 163. $23\frac{1}{2}$ pages. I.

RECORD OF DEEP-WELL DRILLING FOR 1904. By M. L. Fuller, E. F. Lines, and A. C. Veatch. U. S. G. S., Bull. 264, 106 pages, 1905; Bull. 298, 299 pages, 1906.

DEEP DIAMOND-BORING AT BALFOUR MAINS, FIFESHIRE, GREAT BRITAIN. By J. G. Thompson. T. I. M. E., vol. 36, p. 574. 6 pages. I.

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TRANSVAAL DRILL COMPETITION, 1909. M. & M., vol. 31, p. 459. 6½ columns. I.

RATE OF DRILLING AT GOLDFIELD, NEVADA. E. & M. J., vol. 90, p. 1246. ¼ column.

RATE OF DRILLING WITH MACHINE DRILL. P. C. M. & M. Soc. S. A., vol. 8, p. 272. 6 columns.

DRILL CONTEST ON THE RAND. Min. & Sci. Press, vol. 96, p. 361. 3 columns. I.

SURFACE TRIALS IN RAND STOPE DRILL COMPETITION. By E. M. Weston. E. & M. J., vol. 87, p. 998. 6½ columns.

RATE OF DRILLING WITH WELL DRILLING OUTFIT FOR COPPER PROSPECTING. Min. & Sci. Press, vol. 101, p. 14. Table.

RATE OF DRILLING WITH DIAMOND DRILL IN VARIOUS FORMATIONS. Min. & Sci. Press, vol. 95, p. 461. Table.

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RECENT IMPROVEMENTS IN SUBMARINE DRILLING. E. & M. J., vol. 35, p. 31. 1 column.

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DEFLECTION OF BOREHOLES IN DIAMOND DRILLING. P. C. M. & M. Soc. S. A., vol. 7, p. 380. ½ column.

DEVIATION OF BORE-HOLES. By J. Kitchin. Min. & Sci. Press, vol. 96, p. 462. 6 columns. I.

THE DEVIATION OF RAND BORE-HOLES FROM THE VERTICAL. By Joseph Kitchin. T. I. M. & M., vol. 17, p. 87. 50 pages. I.

CROOKED HOLES WITH CHURN DRILLS. E. & M. J., vol. 90, p. 851. ¼ column.

See also **CHURN DRILLS AND DRILLING. APPARATUS FOR SURVEYING A BORE-HOLE.** E. & M. J., vol. 87, p. 854. 2 columns. I.

SURVEYING DIAMOND DRILL HOLES. Sch. Mines Quart., vol. 30, p. 305. 3 pages. I.

CONTROLLING THE CURVATURE OF DIAMOND DRILL HOLES. By E. E. White. E. & M. J., vol. 90, p. 546. 3 columns. D.

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DIAMOND-DRILL TEST TUBES. By J. E. Jopling. M. & M., vol. 30, p. 635. 3 columns. I.

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MEXICAN NOTES: Economic Advancement. By M. R. Lamb. Min. & Sci. Press, vol. 96, p. 702, 5 columns, I.; p. 736, 4 columns, I.

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STATUS OF MINING AND SMELTING IN COLORADO. By F. Guiterman. E. & M. J., vol. 90, p. 1009. 6 columns.

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MINING INDUSTRY IN 1907. By A. H. Brooks. U. S. G. S., Bull. 345, p. 30. 24 pages. 1907.

MODERN PROGRESS IN MINING AND METALLURGY IN THE WESTERN UNITED STATES. By D. W. Brunton. Min. & Sci. Press, vol. 99, p. 453. 12 columns.

ARE WE PROGRESSING? By S. A. Worcester. Min. & Sci. Press, vol. 99, p. 856. 2½ columns.

LAKE SUPERIOR IRON MINES IN 1907. By D. E. Woodbridge. E. & M. J., vol. 85, p. 113. 9 columns.

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THE EXPLORATION OF OUR MINERAL RESOURCES. By R. W. Brock. J. M. Soc. N. S., vol. 13, p. 125. 12 pages.

MINING, QUARRYING, AND METALLURGICAL PROCESSES AND PRODUCTS. By H. T. De La Bache. Min. Mag., vol. 1, p. 331. 17 pages.

THE METALLIC WEALTH OF THE UNITED STATES. Min. Mag., vol. 3, p. 281. 5 pages.

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REQUIRED A NEW PAIR OF GLASSES. By F. C. Keighley. E. & M. J., vol. 89, p. 12. 5½ columns.

MINING: Its Embarrassments and Its Results. Min. Mag., vol. 2, p. 636. 5 pages.

THE INFLUENCE OF THE RAILROADS OF THE UNITED STATES AND CANADA ON THE MINERAL INDUSTRY. By J. Douglas. T. I. M. & M., vol. 19, p. 2. 55 pages.

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RELATION BETWEEN MINERAL AND CHEMICAL INDUSTRIES. By G. T. Holloway. Min. & Sci. Press, vol.

100, p. 424, 8½ columns; p. 450, 5½ columns.

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DIRECT AND COLLATERAL RELATIONS OF MINING: The Philosophy of the American Railroad System. By R. G. Rankin. Min. Mag., vol. 10, p. 8, 4½ pages; p. 98, 8 pages; p. 263, 4½ pages; p. 338, 6 pages.

EMPIRE BUILDING IN WESTERN MEXICO. By P. E. Barbour. E. & M. J., vol. 85, p. 694. 10½ columns. I.

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THE MINE AND THE FARM. By R. Drummond. J. M. Soc. N. S., vol. 14, p. 15. 14 pages.

THE MINES AND AGRICULTURE OF ROMAN BRITAIN. By A. Del Mar. Min. & Sci. Press, vol. 95, p. 28. 2½ columns.

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GOLD MINING AND THE HISTORY OF CIVILIZATION. By F. L. Garrison. E. & M. J., vol. 85, p. 1094. 12 columns.

FACTORS IN SUCCESSFUL GOLD MINING. By A. Del Mar. Min. & Sci. Press, vol. 99, p. 587. 2½ columns.

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- GOLD AND SILVER PRODUCED BY THE MINES OF AMERICA FROM 1492 to 1848.** Min. Mag., vol. 1, p. 219, 9½ pages; p. 365, 12 pages, I.
- SILVER PRICES IN 1909.** By T. T. Van Wagenen. Min. & Sci. Press, vol. 98, p. 54. 4 columns. D.
- ACTUAL EARNING POWER OF THE RAND MINES.** By G. A. Denny. E. & M. J., vol. 85, p. 593. 6 columns.
- THE COMMERCIAL ASPECT OF RAND "PROFITS."** By G. A. Denny. E. & M. J., vol. 85, p. 446. 7½ columns.
- THE WORLD'S GOLD PRODUCTION.** By T. A. Rickard. Min. Mag., London, vol. 2, p. 455. 5½ columns.
- GOLD PRODUCTION AND ITS EFFECTS.** By T. L. Garrison. Min. & Sci. Press, vol. 96, p. 268. 1½ columns.
- PRODUCTION OF PRECIOUS METALS IN THE UNITED STATES.** By C. King. U. S. G. S., 2d Ann. Rept., pp. 331-401. 1880-81. I.
- GOLD AND SILVER PRODUCTION IN THE UNITED STATES.** Min. & Sci. Press, vol. 98, p. 9. 2 columns. Table.
- A GEOLOGICAL ANALYSIS OF THE SILVER PRODUCTION OF THE UNITED STATES IN 1906.** By W. Lindgren. U. S. G. S., Bull. 340, p. 23. 11 pages. 1907.
- YIELD OF THE COMSTOCK MINES.** Min. & Sci. Press, vol. 22, p. 296. ¼ column.
- See also **COST OF PRODUCTION OF VARIOUS MATERIALS.**
- The Function of Gold and Silver**
- ON THE DECLINE IN THE VALUE OF THE PRECIOUS METALS.** Min. Mag., vol. 9, p. 525. 3½ pages.
- "DEPRECIATION OF GOLD."** By J. P. Norton. E. & M. J., vol. 84, p. 446. 3½ columns.
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- CONSERVATION AND ALASKAN COAL.** By H. F. Bain. Min. & Sci. Press, vol. 100, p. 185. 7½ columns. Map.

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PAPERS ON THE CONSERVATION OF MINERAL RESOURCES. U. S. G. S., Bull. 395, 214 pages. I. 1909.

PRESIDENT TAFT ON CONSERVATION OF MINERAL LANDS. E. & M. J., vol. 90, p. 495. 6½ columns.

CONSERVATION OF ORES AND MINERALS. By Andrew Carnegie. E. & M. J., vol. 85, p. 1051. 7 columns.

THE AMERICAN INSTITUTE OF MINING ENGINEERS AND THE CONSERVATION OF NATURAL RESOURCES. By J. Birkinbine. T. A. I. M. E., vol. 40, p. 412. 7 pages.

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THE CONSERVATION OF THE FORESTS AND WATER POWERS OF WISCONSIN. By E. M. Griffiths. J. W. Soc. E., vol. 13, p. 617. 14 pages. I.

THE CONSERVATION OF OUR FORESTS IN RELATION TO THE DEVELOPMENT OF OUR METAL MINES. By E. P. Brown. J. M. Soc. N. S., vol. 14, p. 31. 5½ pages.

"CONCRETE LUMBER" AND FOREST PRESERVATION. E. & M. J., vol. 87, p. 421. ¾ column.

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COPPER INDUSTRY. By C. Kirchoff, Jr. U. S. G. S., Mineral Resources 1883 and 1884, vol. 14.

THE COPPER SITUATION. By James Douglas. Min. & Sci. Press, vol. 95, p. 526. 4 columns.

THE ACTUAL SITUATION OF COPPER, 1908. By J. Douglas. Min. & Sci. Press, vol. 96, p. 7. 1½ columns.

VISIT TO THE LAKE SUPERIOR REGION. By E. Rivot. Min. Mag., vol. 6, p. 28, 8½ pages; p. 99, 8 pages; p. 207, 4 pages; p. 414, 3 pages.

METHODS OF COPPER MINING. By H. L. Hancock. Min. & Sci. Press, vol. 98, p. 730. 2½ columns.

THE WORK OF THE TENNESSEE COPPER COMPANY. By K. R. Morgan. Min. & Sci. Press, vol. 101, p. 675. 5½ columns.

DIAGRAM OF COPPER PRICES. E. & M. J., vol. 89, p. 560. 1 column. D.

THE PRODUCTION OF COPPER. By L. C. Groton. Min. & Sci. Press, vol. 96, p. 102. 1½ columns.

COPPER THROUGH FIFTY YEARS: Production. By J. Douglas. Min. & Sci. Press, vol. 100, p. 727. 6 columns.

LAKE SUPERIOR COPPER MINING IN 1909: Production. By R. H. Maurer. Min. & Sci. Press, vol. 100, p. 22. 8½ columns. I.

COPPER IN 1909: Production, etc. By L. Vogelstein. Min. & Sci. Press, vol. 100, p. 9. 5 columns. D.

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IRON TRADE OF SWEDEN AND NORWAY. By H. Scriviner. Min. Mag., vol. 3, p. 505. 8 pages.

THE IRON ORE SITUATION IN NOVA SCOTIA. By J. E. Woodman. J. M. Soc. N. S., vol. 10, p. 133. 14 pages.

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AMERICAN IRON TRADE FROM 1619 TO 1886. By J. M. Swank. U. S. G. S., Mineral Resources, 1886, vol. 8. 12 pages.

LAKE SUPERIOR IRON ORE SHIPMENTS. E. & M. J., vol. 89, p. 706. 1½ columns.

PRICES OF LAKE IRON ORE FROM 1891 TO 1910. E. & M. J., vol. 89, p. 467. ¾ column.

PRICES OF LAKE ORES: 1857 to 1883. E. & M. J., vol. 87, p. 854. ¼ column.

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RECIPROCITY IN COAL. By W. C. Milner. J. M. Soc. N. S., vol. 10, p. 148. 12 pages.

COAL AND IRON PRODUCTION OF THE UNITED STATES. Min. Mag., vol. 10, p. 39. 12½ pages.

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PROBLEMS IN THE COAL INDUSTRY. M. & M., vol. 30, p. 689. 2 columns.

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REMOVAL OF THE COAL DUTY. By F. A. Hill. M. & M., vol. 29, p. 359. 1 column.

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Miscellaneous Production

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ORE SHIPMENTS. Min. & Sci. Press, vol. 22, p. 216. 2 columns.

PRODUCTION OF ARIZONA MINES IN 1907. E. & M. J., vol. 86, p. 422. 3½ columns.

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REVIEW OF PROGRESS IN THE MINERAL PRODUCTION OF BRITISH COLUMBIA. By E. Jacobs. J. C. M. I., vol. 10, p. 183. 5 pages.

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MINERAL PRODUCTION OF BRITISH COLUMBIA. By E. Jacobs. E. & M. J., vol. 85, p. 1291. 6½ columns.

MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1907. By E. Jacobs. J. C. M. I., vol. 11, p. 452. 7 pages.

MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1908. By E. Jacobs. E. & M. J., vol. 87, p. 247. 12½ columns.

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MINERAL PRODUCTION OF CHINA IN 1907. By T. T. Read. E. & M. J., vol. 85, p. 1296. 8 columns.

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MINERAL PRODUCTION OF CHILE IN 1908 AND 1909. By F. A. Sundt. Min. & Sci. Press, vol. 100, p. 802. 1½ columns.

See also CHILE.

MINERAL PRODUCTION OF IDAHO FOR 1909. By F. C. Moore. E. & M. J., vol. 89, p. 527. 4 columns.

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CATALOGUE AND INDEX OF THE PUBLICATIONS OF THE UNITED STATES GEOLOGICAL SURVEY, 1880-1901. By P. C. Warman. U. S. G. S., Bull. 177, 858 pages, 1901; Bull. 215, 234 pages, 1903; Bull. 222, 208 pages, 1904.

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STANDARDIZATION OF ENGLISH IN TECHNICAL LITERATURE. By T. A. Rickard. Min. & Sci. Press, vol. 101, p. 233. $5\frac{1}{2}$ columns.

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FIRING AMMONIUM NITRATE EXPLOSIVES. M. & M., vol. 31, p. 767. 3 columns.

FUSES FOR SUBMARINE WORK. M. & M., vol. 31, p. 224. 2 columns. I.

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Use of Explosives in Mining

A PRIMER ON EXPLOSIVES FOR COAL MINERS. By C. E. Munroe and C. Hall. U. S. G. S., Bull. 423, 61 pages. 1909.

USE OF EXPLOSIVES IN BRITISH COAL MINES. E. & M. J., vol. 90, p. 613. 3½ columns.

KINDS OF EXPLOSIVES USED IN THE ANTHRACITE MINES. M. & M., vol. 29, p. 47. ½ column.

See also KINDS OF EXPLOSIVES.

THE USE OF BLACK POWDER IN COAL MINES. E. & M. J., vol. 90, p. 974. 2½ columns.

AMOUNT OF POWDER USED IN THE NOVA SCOTIA COAL MINES. E. & M. J., vol. 86, p. 625. ½ column.

AN IMPROVED METHOD OF BLASTING COAL. E. & M. J., vol. 86, p. 1014. 1 column. I.

MINING COAL WITH EXPLOSIVES. M. & M., vol. 30, p. 442. 3½ columns. I.

DISCUSSION OF EXPLOSIVES IN COAL MINES. By F. F. Morris. E. & M. J., vol. 88, p. 1222. 17½ columns. I.

SHOOTING OFF THE SOLID. E. & M. J., vol. 88, p. 499. 1 column.

SHOOTING OFF THE SOLID. E. & M. J., vol. 86, p. 6. 1½ columns.

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SHOOTING REGULATIONS AT THE DAWSON COAL MINES, NEW MEXICO. M. & M., vol. 31, p. 655. 1 column.

SHOT-FIRING SYSTEM AS EMPLOYED IN THE COKEDALE PLANT. E. & M. J., vol. 88, p. 1010. D.

UTAH FUEL COMPANY'S SHOT-FIRING RULES. By A. C. Watts. M. & M., vol. 30, p. 590. 3 columns.

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TESTING EXPLOSIVES. E. & M. J., vol. 87, p. 446. ¼ column.

TESTING EXPLOSIVES. E. & M. J., vol. 88, p. 1222. 17 columns. I.

SENSITIVE TEST FOR EXPLOSIVES. By H. Kast. Min. & Sci. Press, vol. 100, p. 584. 1½ columns.

TESTING EXPLOSIVES IN SILESIA. E. & M. J., vol. 86, p. 888. 1 column.

GIANT POWDER EXPERIMENTS: Tests. Min. & Sci. Press, vol. 22, p. 25. 1½ columns.

DETERMINATION OF MOISTURE IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 7, p. 123. Note.

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ACTION OF SULPHUR IN A GAS COAL. E. & M. J., vol. 87, p. 897. $\frac{1}{2}$ column.

WHY SULPHUR ABOUNDS LOCALLY IN CERTAIN COAL SEAMS. By J. R. Heckman. E. & M. J., vol. 86, p. 14. $1\frac{1}{2}$ columns.

CHARACTERISTICS OF STEAM COAL. P. C. M. & M. Soc. S. A., vol. 7, p. 353. 2 columns.

CHARACTER OF CHILIAN COAL. T. I. M. E., vol. 38, p. 43. 2 pages.

WHAT IS COAL: A Commercial Definition. Min. & Sci. Press, vol. 101, p. 663. $1\frac{1}{2}$ columns.

COMMERCIAL CLASSIFICATION OF FUELS. M. & M., vol. 31, p. 397. $4\frac{1}{2}$ columns.

FUEL AND ITS APPLICATION. Min. Mag., vol. 5, p. 499. 10 pages.

PURE COAL AS A BASIS FOR THE COMPARISON OF BITUMINOUS COALS. By W. F. Wheeler. T. A. I. M. E., vol. 38, p. 621. 12 pages. I.

PURE COAL AS A BASIS FOR THE COMPARISON OF BITUMINOUS COALS: Discussion of the paper of W. F. Wheeler, Trans., vol. 38, p. 621. T. A. I. M. E., vol. 39, p. 800. 5 $\frac{1}{2}$ pages.

A REVIEW OF SOME RECENT SCHEMES FOR THE CLASSIFICATION OF COALS.

By A. L. McCallum. J. M. Soc. N. S., vol. 12, p. 113. 4 pages.

CLASSIFICATION OF COAL. By D. B. Dowling. J. C. M. I., vol. 11, p. 220. 11 pages.

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WEATHERING OF COAL IN THE ARID REGION OF THE GREEN RIVER BASIN, SWEETWATER COUNTY, WYOMING. By A. B. Schultz. U. S. G. S., Bull. 381, p. 282. 15 pages. 1908.

See also **GEOLOGIC PROGRESS AND STUDIES.**

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THE OXIDATION OF COAL. By O. Boudourd. E. & M. J., vol. 87, p. 995. $2\frac{1}{2}$ columns.

TEMPERATURE OF COAL PILES. E. & M. J., vol. 86, p. 862. $\frac{1}{2}$ column.

THE VARIABLE COLOR OF COAL ASH. By W. P. Young. E. & M. J., vol. 86, p. 533. 3 columns.

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A NEW SYSTEM OF MODERN COKE OVENS. By F. Fieschi. E. & M. J., vol. 86, p. 378. 10½ columns. I.

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MANUFACTURE OF COKE. By J. D. Weeks. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.

THE MANUFACTURE OF COKE IN NORTHERN WEST VIRGINIA. By J. W. Knowlton. E. & M. J., vol. 86, p. 426. 2½ columns.

MAKING COKE FROM INDIANA COAL. E. & M. J., vol. 85, p. 1103. 1½ columns.

JONES AND LAUGHLIN'S COKE PLANT. By A. L. Affelder. M. & M., vol. 29, p. 195. 9 columns. I.

COKE-OVENS AT THE PLANT OF THE STAG CAÑON FUEL COMPANY, NEW MEXICO. T. A. I. M. E., vol. 40, p. 371. 2 pages. I.

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COAL-LEVELING MACHINE FOR BEEHIVE OVENS. E. & M. J., vol. 89, p. 578. 3 columns. I.

AN AUTOMATIC COKE WATERER. By W. L. Affelder. M. & M., vol. 30, p. 725. 3½ columns. I.

COKE DRAWING MACHINES. By W. W. Macfarren. P. E. Soc. W. Pa., vol. 23, p. 451. 66 pages. I.

THE PYROMETRY OF THE BEEHIVE COKE OVEN. By J. R. Campbell. E. & M. J., vol. 88, p. 120. 9 columns. I.

PYROMETRY OF BEEHIVE COKE OVENS. By J. R. Campbell. M. & M., vol. 30, p. 141. 6½ columns. I.

WASTE FROM BEEHIVE COKING. Min. & Sci. Press, vol. 97, p. 676. 1½ columns.

THE MEXICAN COKE INDUSTRY. By R. D. Martin. M. & M., vol. 30, p. 129. 6 columns. I.

THE PRODUCTION AND USE OF COKE. By W. Hartman. E. & M. J., vol. 89, p. 1162. 4 columns.

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PEAT. By H. H. Hindshaw. U. S. G. S., Mineral Resources, 1904.

PEAT DEPOSITS. By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 4, 9 pages.

THE UTILIZATION OF PEAT FOR INDUSTRIAL AND METALLURGICAL PURPOSES. By E. Nystrom. J. C. M. I., vol. 11, p. 231. 5 pages.

THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 442, p. 101. 32 pages. 1909.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.

THE AMERICAN PEAT SOCIETY. E. & M. J., vol. 90, p. 254. 2 columns.

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BURNING LIQUID FUEL WITHOUT STEAM OR COMPRESSED AIR. By R. Schorr. Min. & Sci. Press, vol. 96, p. 851. 2½ columns.

A MODERN FUEL-OIL STORAGE SYSTEM. By H. W. Beecher. Min. & Sci. Press, vol. 97, p. 389. 2½ columns.

OIL VS. COAL AS A FUEL. E. & M. J., vol. 83, p. 247. 1 column.

OIL BURNERS FOR REVERBERATORY FURNACES. By C. F. Shelby. E. & M. J., vol. 89, p. 31. 4 columns. I.

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RESULTS OF PURCHASING COAL UNDER GOVERNMENT SPECIFICATIONS. By J. S. Butrows. U. S. G. S., Bull. 378, 44 pages, 1909; Bull. 428, 80 pages, 1910.

PURCHASE OF COAL ON SPECIFICATION. By J. E. Woodwell. M. & M., vol. 29, p. 63. 5 columns.

PURCHASE OF COAL BY B. T. U. METHOD. By S. A. Taylor. M. & M., vol. 30, p. 298. 5½ columns. I.

BUYING AND HANDLING STEAM COAL. M. & M., vol. 30, p. 352. 3½ columns.

THE PURCHASE OF COAL UNDER GOVERNMENT AND COMMERCIAL SPECIFICATIONS, ON THE BASIS OF ITS HEATING VALUE, WITH ANALYSES OF COAL DELIVERED UNDER GOVERNMENT CONTRACTS. By D. T. Randall. U. S. G. S., Bull. 339, 27 pages. I. 1908.

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GAS POWER IN HIGH ALTITUDES. E. & M. J., vol. 90, p. 1262. 4½ columns. I.

SUCTION GAS AND ITS APPLICATION TO MINING. By G. D. Stephen. E. & M. J., vol. 87, p. 1076. 6 columns. I.

POWER PRODUCTION AT COLLIERIES, WITH SPECIAL REFERENCE TO GAS POWER AND ELECTRICAL CENTRALIZATION. By R. Crawford and H. Moores. T. I. M. E., vol. 39, p. 501. 19 pages. I.

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A TARLESS OIL-GAS PRODUCER. By A. B. Davis. Min. & Sci. Press, vol. 100, p. 219. 5 columns. I.

UTILIZING BLAST FURNACE GASES AT GARY. E. & M. J., vol. 87, p. 20. 7½ columns.

POWER FROM COPPER BLAST-FURNACE GASES. By R. Schott. E. & M. J., vol. 87, p. 459. 5½ columns.

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THE USE OF NATURAL GAS IN THE JOPLIN DISTRICT. By D. Brittain. E. & M. J., vol. 86, p. 568. 7½ columns. I.

THE UTILIZATION OF FIREDAMP IN SARREBRUCK COALFIELDS. E. & M. J., vol. 89, p. 430. ½ column.

THE BEGINNING OF THE USE OF NATURAL GAS FOR FUEL. By J. L. Cowan. Min. & Sci. Press, vol. 101, p. 44. 4 columns.

See also OCCURRENCE OF NATURAL GAS.

THE USE OF COKE-OVEN GAS AS FUEL. By T. J. Brown. J. M. Soc. N. S., vol. 15, p. 1. 8 pages.

USE OF COKE-OVEN GAS AS FUEL. By T. J. Brown. M. & M., vol. 30, p. 690. 3½ columns.

UTILIZATION OF BY-PRODUCT GASES FROM COKE OVENS. By H. M.

Payne. E. & M. J., vol. 89, p. 927. 2½ columns.

See also COKE, ETC.

THE PRESENT STATUS OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES. By R. H. Fernald. U. S. G. S., Bull. 316, p. 439. 22 pages. 1906.

A NEW GAS PRODUCER FOR LOW GRADE FUEL. By A. Gradenwitz. E. & M. J., vol. 88, p. 1019. 3½ columns. I.

RECENT DEVELOPMENT OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES. By R. H. Fernald. U. S. G. S., Bull. 416, 82 pages. I. 1909.

A BITUMINOUS POWER GAS PRODUCER. By E. F. Bulmahn. P. E. Soc. W. Pa., vol. 25, p. 603. 19 pages. I.

THE PRESENT STATUS OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES. By R. H. Fernald. J. W. Soc. E., vol. 12, p. 551. 58 pages. I.

PROCESSES FOR THE DISTILLATION AND PURIFICATION OF THE PRODUCTS OF COAL. By C. B. Mansfield. Min. Mag., vol. 7, p. 1. 9 pages.

SULPHUR IN GASEOUS FUELS. By F. Louis Grammer. T. A. I. M. E., vol. 39, p. 545. 2½ pages.

THE VALUE OF GAS POWER. By C. E. Lucke. Sch. Mines Quart., vol. 30, p. 199. 18 pages. I.

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COAL DUST FIRING OF REVERBERATORY FURNACES. E. & M. J., vol. 85, p. 660. 1½ columns.

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THE FIREWOOD SUPPLIES OF THE GOLD-FIELDS. By E. Kelso. T. Au. I. M. E., vol. 8, pt. 1, p. 108. 4 pages.

THE AMOUNT OF WOOD IN A CORD. M. & M., vol. 30, p. 140. $\frac{1}{2}$ column.

CHARCOAL: The Blast Furnace Fuel of Ontario. By R. H. Sweetzer. J. C. M. I., vol. 11, p. 165. 6 pages. I.

TAN BARK AS A BOILER FUEL. By D. M. Myers. Sch. Mines Quart., vol. 31, p. 116. 27 $\frac{1}{2}$ pages. I.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.

Briquetting of Fuels and Ores

CONDITION OF THE COAL-BRIQUETTING INDUSTRY IN THE UNITED STATES. By E. W. Parker. U. S. G. S., Bull. 316, p. 460. 26 pages. 1906.

COAL-BRIQUETTING IN THE UNITED STATES. By E. W. Parker. T. A. I. M. E., vol. 38, p. 581. 40 pages. I.

COAL BRIQUETTING AT HARTSHORNE, OKLAHOMA. By C. T. Malcomson. M. & M., vol. 29, p. 339. 7 $\frac{1}{2}$ columns. I.

COAL BRIQUETTING. By C. Scholz. J. W. Soc. E., vol. 14, p. 137. 18 pages. I.

COAL BRIQUETTE PLANT AT BANK-HEAD, ALBERTA, CANADA. By E. W. Parker. T. A. I. M. E., vol. 39, p. 236. 7 pages. I.

COAL-BRIQUETTE PLANT AT BANK-HEAD, ALBERTA, CANADA: Discussion of the paper of E. W. Parker, p. 236. T. A. I. M. E., vol. 39, p. 892. 4 $\frac{1}{2}$ pages.

PROGRESS IN FUEL BRIQUETTING. By R. Schott. E. & M. J., vol. 89, p. 524. 5 columns. D.

A COMMERCIAL FUEL-BRIQUETTE PLANT. By W. H. Blauvelt. T. A.

I. M. E., vol. 41, p. 255, 13 pages, I.; p. 891, 9 $\frac{1}{2}$ pages.

BINDERS FOR COAL BRIQUETTES. By J. E. Mills. U. S. G. S., Bull. 343. 56 pages. 1908.

LIGNITE BRIQUETTING IN GERMANY. By R. Schott. E. & M. J., vol. 85, p. 460. 5 $\frac{1}{2}$ columns.

BRIQUETTING SLAG WITH COKE DUST. E. & M. J., vol. 89, p. 820. $\frac{1}{2}$ column.

PROGRESS WITH THE GRÖNDAL PROCESS OF CONCENTRATING AND BRIQUETTING IRON ORES. By P. McN. Bennie. J. C. M. I., vol. 11, p. 189. 14 pages. I. Maps.

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FUEL: Its Combustion and Economy. By J. Sharpe. T. Au. I. M. E., vol. 2, p. 106. 3 $\frac{1}{2}$ pages.

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NOTES ON FUEL ECONOMY, AND ITS APPLICATION TO NOVA SCOTIA. By A. A. Hayward. J. M. Soc. N. S., vol. 13, p. 1. 20 pages. D.

OUR STEAM-COAL AND ITS USES. By Lees Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.

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PITTSBURG TESTING STATION. M. & M., vol. 30, p. 233. 2 $\frac{1}{2}$ columns.

COAL-TESTING IN THE UNITED STATES. P. C. M. & M. Soc. S. A., vol. 7, p. 193. 4 columns.

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COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COAL. E. & M. J., vol. 87, p. 611. 2 $\frac{1}{2}$ columns.

REPORT ON THE OPERATIONS OF THE COAL-TESTING PLANT OF THE UNITED STATES GEOLOGICAL SURVEY AT THE LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MISSOURI, 1904. By E. W. Parker, J. A.

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- Holmes and others. U. S. G. S., Professional Paper 48, 1492 pages. 1906.
- A STUDY OF FOUR HUNDRED STEAMING TESTS, MADE AT THE FUEL-TESTING PLANT, ST. LOUIS, MISSOURI. By L. P. Breckenridge. U. S. G. S., Bull. 325. 196 pages. 1907.
- WASHING AND COKING TESTS OF COAL AND CUPOLA TESTS OF COKE. By R. Moldenke and others. U. S. G. S., Bull. 336. 76 pages. 1908.
- COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COAL ON LOCOMOTIVES, INCLUDING TORPEDO-BOAT TESTS AND SOME FOREIGN SPECIFICATIONS FOR BRIQUETTED FUEL. By W. F. M. Goss. U. S. G. S., Bull. 363. 57 pages. I. 1908.
- TESTS OF COAL AND BRIQUETTS AS FUEL FOR HOUSE-HEATING BOILERS. By D. T. Randall. U. S. G. S., Bull. 366. 44 pages. I. 1908.
- COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COALS ON THE TORPEDO-BOAT BIDDLE. By W. T. Ray and H. Kreisinger. U. S. G. S., Bull. 403. 49 pages. 1909.
- TESTS OF RUN-OF-MINE AND BRIQUETTED COAL IN A LOCOMOTIVE BOILER. By W. T. Ray and H. Kreisenger. U. S. G. S., Bull. 412, 32 pages. 1909.
- TEST OF COAL BRIQUETTS. By W. F. M. Goss. M. & M., vol. 30, p. 433. 2 columns.
- BRIQUETTING TESTS AT UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By C. L. Wright. U. S. G. S., Bull. 385. 41 pages. I. 1909.
- See also BRIQUETTING OF FUELS AND ORES.
- INCIDENTAL PROBLEMS IN GAS-PRODUCER TESTS. By R. H. Fernald and others. U. S. G. S., Bull. 393. 29 pages. 1909.
- See also GAS FOR POWER.
- COMMERCIAL DEDUCTIONS FROM COMPARISONS OF GASOLINE AND ALCOHOL TESTS ON INTERNAL COMBUSTION ENGINES. By R. M. Strong. U. S. G. S., Bull. 392. 38 pages. 1909.
- THE SMOKELESS COMBUSTION OF COAL IN BOILER PLANTS. By D. T. Randall and H. W. Weeks. U. S. G. S., Bull. 373. 188 pages. 1909.
- RULES FOR SMOKELESS CONSUMPTION OF FUELS. By R. Grimshaw. E. & M. J., vol. 87, p. 1142. 2½ columns.
- THE COMBUSTION OF COAL. By J. A. Holmes. T. A. I. M. E., vol. 41, p. 244. 11½ pages.
- COMBUSTION OF COAL UPON GRATES. By E. G. Bailey. E. & M. J., vol. 86, p. 184. 4 columns.
- THE FUEL ECONOMY OF DRY BLAST. By R. S. Moore. M. & M., vol. 30, p. 263. 1½ columns. D.
- THE LIMIT OF FUEL-ECONOMY IN THE IRON BLAST-FURNACE. By N. M. Langdon. T. A. I. M. E., vol. 40, p. 614. 22 pages.
- CALCULATION OF CALORIFIC POWER OF FUELS. P. C. M. & M. Soc. S. A., vol. 7, p. 417. ¼ column.
- AN INITIAL COAL-SUBSTANCE WITH A CONSTANT THERMAL VALUE. By S. W. Parr and W. F. Williams. Min. & Sci. Press, vol. 97, p. 501. 1½ columns.
- THE REAL VALUE OF STEAM COAL. By D. T. Randall. E. & M. J., vol. 88, p. 565. 1½ columns.
- PRACTICAL FUEL VALUES. By W. P. Young. M. & M., vol. 31, p. 178. 2½ columns.
- A DETAILED STUDY OF PRACTICAL FUEL VALUES. By W. P. Young. E. & M. J., vol. 89, p. 14. 4 columns.
- IGNITION POINTS OF WOOD AND COAL. P. C. M. & M. Soc. S. A., vol. 9, p. 134. ¼ column.
- IGNITION-POINTS OF WOOD AND COAL. By Henry Hall. T. I. M. E., vol. 36, p. 2. 6 pages.

GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS 215

- THE EFFECT OF OXYGEN IN COAL. By D. White. U. S. G. S., Bull. 382. 74 pages. I. 1909.
- EQUALIZATION OF FUELS. By H. K. Meyers. M. & M., vol. 31, p. 405. 3½ columns. D.
- BURNING THE SMALL SIZES OF ANTHRACITE FOR HEAT AND POWER PURPOSES. By D. T. Randall. U. S. G. S., Bull. 378. 44 pages. 1909.
- GRAVITY DETERMINATION OF COAL. By A. G. Blakeley and E. M. Chance. M. & M., vol. 31, p. 499. 2 columns.
- See also THEORY OF CONCENTRATION.
- THE UTILIZATION OF FUEL IN LOCOMOTIVE PRACTICE. By W. F. M. Goss. U. S. G. S., Bull. 402. 28 pages. 1909.
- See also GAS FOR POWER.
- See also COST OF FUEL.

GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

Geological Surveys

- RECORDING GEOLOGICAL DATA. By T. F. Field. M. & M., vol. 30, p. 14. 4 columns. I.
- GEOLOGY: A Popular Lecture. By J. F. Kemp. Sch. Mines Quart., vol. 29, p. 125. 24 pages.
- GEOLOGY: Its Importance and Scope. By J. F. Kemp. Min. & Sci. Press, vol. 96, p. 497, 8 columns; p. 533, 7 columns.
- ELEMENTARY GEOLOGY. Min. Mag., vol. 1, p. 135. 10 pages. I.
- MODERN GEOLOGY. Min. Mag., vol. 1, p. 480. 9 pages.
- AMERICAN GEOLOGY. Min. Mag., vol. 3, p. 392. 9½ pages.
- NEED OF INSTRUMENTAL SURVEYING IN PRACTICAL GEOLOGY. By B. S. Lyman. T. A. I. M. E., vol. 40, p. 636. 8 pages. I.
- THE UNITED STATES GEOLOGICAL SURVEY. By R. H. Chapman. J. C. M. I., vol. 13, p. 372. 24 pages. I.
- THE UNITED STATES GEOLOGICAL SURVEY: Its Origin, Development, Organization, and Operation. U. S. G. S., Bull. 227. 205 pages. I. 1904.
- WORK OF STATE GEOLOGICAL SURVEYS. By H. F. Bain. J. C. M. I., vol. 13, p. 364. 7½ pages.
- GEOGRAPHICAL DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 187. 446 pages. 1901.
- GEOGRAPHIC DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 299. 690 pages. 1906.
- ALASKAN GEOGRAPHIC NAMES. By M. Baker. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 487-509. 1899-1900.
- WORK OF THE GEOLOGICAL SURVEY OF CANADA. E. & M. J., vol. 85, p. 1105. 5 columns.
- GEOLOGICAL AND MINING NOTES ON CHINA. By A. Hassam. T. I. M. E., vol. 36, p. 353. 12 pages.
- A GEOGRAPHIC DICTIONARY OF CONNECTICUT. By H. Gannett. U. S. G. S., Bull. 117. 67 pages. 1894.
- THE WORK OF THE STATE (ILLINOIS) GEOLOGICAL SURVEY. By H. F. Bain. J. W. Soc. E., vol. 12, p. 233. 18 pages. I.
- A GEOGRAPHIC DICTIONARY OF MASSACHUSETTS. By H. Gannett. U. S. G. S., Bull. 116. 126 pages. 1894.
- A GEOGRAPHIC DICTIONARY OF NEW JERSEY. By H. Gannett. U. S. G. S., Bull. 118. 131 pages. 1894. I.
- BIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1886. By N. H. Darton. U. S. G. S., Bull. 44. 35 pages. 1887.
- BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1908. By J. M. Nickles. U. S. G. S., Bull. 409, 148 pages, 1909; Bull. 444, 174 pages, 1910.

RECORD OF NORTH AMERICAN GEOLOGY FOR 1807 TO 1889 INCLUSIVE. By N. H. Darton. U. S. G. S., Bull. 75, 173 pages, 1891; Bull. 91, 88 pages, 1891; Bull. 99, 73 pages, 1892.

BOUNDARIES OF THE UNITED STATES AND THE SEVERAL STATES AND TERRITORIES, WITH A HISTORICAL SKETCH OF THE TERRITORIAL CHANGES. By H. Gannett. U. S. G. S., Bull. 13. 135 pages. 1885.

NOTES ON THE GEOLOGICAL SURVEYS OF VARIOUS COUNTRIES. By J. Stirling. T. Au. I. M. E., vol. 5, p. 192. 25 pages.

Geological Formations

NORTH AMERICAN GEOLOGIC FORMATION NAMES. By F. B. Weeks. U. S. G. S., Bull. 191. 448 pages. 1902.

THE NORTH AMERICAN CONTINENT DURING CAMBRIAN TIME. By C. D. Walcott. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 523-568. 1890-91. I.

OBSERVATIONS ON THE JUNCTION BETWEEN THE EASTERN SANDSTONE AND THE KEWEENAW SERIES ON KEWEENAW POINT, LAKE SUPERIOR. By R. D. Irving and T. C. Chamberlain. U. S. G. S., Bull. 23. 124 pages. I. 1885.

TERTIARY HISTORY OF THE GRAND CANYON DISTRICT, WITH ATLAS. By C. E. Dutton. U. S. G. S., Monograph II. 264 pages. I. 1882.

PRE-CAMBRIAN GEOLOGY OF NORTH AMERICA. By C. R. Van Hise and C. K. Leith. U. S. G. S., Bull. 360. 935 pages. I. 1909.

PLEISTOCENE GEOLOGY OF THE LEADVILLE QUADRANGLE, COLORADO. By S. R. Copps. U. S. G. S., Bull. 386. 99 pages. I. 1909.

LIMESTONE IN WEST VIRGINIA. By G. P. Grimsley. E. & M. J., vol. 85, p. 1144. 3 columns.

THE COLORADO FORMATION AND ITS INVERTEBRATE FAUNA. By T. W. Stanton. U. S. G. S., Bull. 106. 288 pages. I. 1893.

THE LARAMIE AND THE OVERLYING LIVINGSTON FORMATION IN MONTANA. By W. H. Weed. U. S. G. S., Bull. 105. 68 pages. I. 1893.

PRELIMINARY PAPER ON AN INVESTIGATION OF ARCHEAN FORMATIONS OF NORTHWESTERN STATES. By R. D. Irving. U. S. G. S., 5th Ann. Rept., pp. 175-242. 1883-84. I.

OBSIDIAN CLIFF, YELLOWSTONE NATIONAL PARK. By J. P. Iddings. U. S. G. S., 7th Ann. Rept., pp. 249-295. 1885-86. I.

ON CLASSIFICATION OF EARLY CAMBRIAN AND PRE-CAMBRIAN FORMATIONS. By R. D. Irving. U. S. G. S., 7th Ann. Rept., pp. 365-454. 1885-86. I.

STRUCTURE OF TRIASSIC FORMATION OF CONNECTICUT VALLEY. By W. M. Davis. U. S. G. S., 7th Ann. Rept., pp. 455-490. 1885-86. I.

QUATERNARY HISTORY OF MONA VALLEY, CALIFORNIA. By I. C. Russell. U. S. G. S., 8th Ann. Rept., pt. 1, pp. 261-394. 1886-87. I.

PLEISTOCENE HISTORY OF NORTHEASTERN IOWA. By W. J. McGee. U. S. G. S., 11th Ann. Rept., pt. 1, pp. 189-577. 1889-90. I.

THE LAFAYETTE FORMATION. By W. J. McGee. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 347-521. 1890-91. I.

THE POTOMAC FORMATION. By L. F. Ward. U. S. G. S., 15th Ann. Rept., pp. 307-397. 1893-94. I.

SOME ANALOGIES IN THE LOWER CRETACEOUS OF EUROPE AND AMERICA. By L. F. Ward. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 463-542. 1894-95. I.

THE TRIASSIC FORMATION OF CONNECTICUT. By W. M. Davis. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 1-192. 1896-97. I.

- TABLE OF NORTH AMERICAN TERTIARY HORIZONS.** By W. H. Dall. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 323-348. 1896-97.
- THE CRETACEOUS FORMATION OF THE BLACK HILLS AS INDICATED BY THE FOSSIL PLANTS.** By L. F. Ward. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 521-946. 1897-98. I.
- THE DEVONIAN SYSTEM OF EASTERN PENNSYLVANIA AND NEW YORK** By C. S. Prosser. U. S. G. S., Bull. 120. 81 pages. I. 1894.
- THE BEAR RIVER FORMATION AND ITS CHARACTERISTIC FAUNA.** By C. A. White. U. S. G. S., Bull. 128. 108 pages. I. 1895.
- THE POTOMAC FORMATION IN VIRGINIA.** By W. M. Fontaine. U. S. G. S., Bull. 145. 149 pages. I. 1896.
- THE INDEX-BEDS IN THE CARBONIFEROUS LIMESTONE SERIES OF SCOTLAND.** By R. W. Dron. T. I. M. E., vol. 38, p. 383. 15 pages. I.
- PRINCIPLES OF PRE-CAMBRIAN NORTH AMERICAN GEOLOGY.** By C. R. Van Hise. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 571-874. 1894-95. I.
- TERTIARY AND CRETACEOUS STRATA OF THE TUSCALOOSA, TANIGBEE AND ALABAMA RIVERS.** By E. A. Smith and L. C. Johnson. U. S. G. S., Bull. 43. 189 pages. I. 1887.
- LAKE BONNEVILLE.** By G. K. Gilbert. U. S. G. S., Monograph I. 438 pages. I. 1890.
- CONTRIBUTIONS TO HISTORY OF LAKE BONNEVILLE.** By G. K. Gilbert. U. S. G. S., 2d Ann. Rept., pp. 167-200. 1880-81. I.
- FORMATION OF TRAVERTINE AND SILICEOUS SINTER BY THE VEGETATION OF THERMAL SPRINGS.** By W. H. Weed. U. S. G. S., 9th Ann. Rept., pp. 613-676. 1887-88. I.
- GENERAL ACCOUNT OF THE FRESH-WATER MORASSES OF THE UNITED STATES, WITH A DESCRIPTION OF THE DISMAL SWAMP DISTRICT OF VIRGINIA AND NORTH CAROLINA.** By N. S. Shaler. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 255-339. 1888-89. I.
- PRELIMINARY REPORT ON SEACOAST SWAMPS OF EASTERN UNITED STATES** By N. S. Shaler. U. S. G. S., 6th Ann. Rept., pp. 353-398. 1884-85.
- SKETCH OF GEOLOGICAL HISTORY OF LAKE LAHONTAN, A QUATERNARY LAKE OF NORTHWESTERN NEVADA.** By I. C. Russell. U. S. G. S., 3d Ann. Rept., pp. 189-235. 1881-82. I.
- TOPOGRAPHIC FEATURES OF LAKE SHORES.** By G. K. Gilbert. U. S. G. S., 5th Ann. Rept., pp. 69-123. 1883-84.
- THE ESMEERALDA FORMATION, A FRESH-WATER LAKE DEPOSIT.** By H. W. Turner. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 191-226. 1899-1900. I.
- MOUNDS FORMED BY MINERAL SPRINGS.** By F. L. Hess. Min. & Sci. Press, vol. 100, p. 675. 2 columns. I.
- THE HIGH PLAINS AND THEIR UTILIZATION.** By W. D. Johnson. U. S. G. S., 21st Ann. Rept., pt. 4, pp. 601-741, 1899-1900, I.; 22d Ann. Rept. pt. 4, pp. 631-669, 1900-1901, I.

Geology of Districts: General

- THE GEOGRAPHY AND GEOLOGY OF ALASKA.** By A. H. Brooks. U. S. G. S., Professional Paper 45. 327 pages. I. 1906.
- GEOLOGY OF THE COPPER RIVER DISTRICT, ALASKA.** E. & M. J., vol. 85, p. 1275. 1 column.
- GEOLOGIC RECONNAISSANCE IN THE MATANUSKA AND TALKEETNA BASINS, ALASKA.** By S. Paige and A. Knopf. U. S. G. S., Bull. 327. 71 pages. I. 1907.
- RECONNAISSANCE FROM FORT HAMLIN TO KOTZEBUE SOUND, ALASKA, BY WAY OF DALL, KANUTI, ALLEN AND KOWAK RIVERS.** By W. C.

218 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- Mendenhall. U. S. G. S., Professional Paper 10. 68 pages. I. 1902.
- PRELIMINARY REPORT ON A RECONNAISSANCE ALONG CHANDLAR AND KOYUKUK RIVERS, ALASKA, IN 1899. By F. C. Schrader. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 441-486. 1899-1900. I.
- A RECONNAISSANCE IN NORTHERN ALASKA ACROSS THE ROCKY MOUNTAINS, ALONG KOYUKUK, JOHN, ANAKTUOK, AND COLVILLE RIVERS, AND THE ARCTIC COAST TO CAPE LISBURNE IN 1901. By F. C. Schrader. U. S. G. S., Professional Paper 20. 139 pages. I. 1904.
- OUTLINE OF THE GEOLOGY AND MINERAL RESOURCES OF THE ILIAMA AND CLARK LAKES REGION. By G. C. Martin and F. J. Katz. U. S. G. S., Bull. 442, p. 179. 22 pages. I. 1909.
- GEOLOGY AND MINERAL RESOURCES OF THE BERNERS BAY REGION, ALASKA. By A. Knopf. U. S. G. S., Bull. 446. 58 pages. I.
- THE GEOLOGY AND MINERAL RESOURCES OF A PORTION OF THE COPPER RIVER DISTRICT, ALASKA. By F. C. Schrader and A. C. Spencer. U. S. G. S., Special Publications, 1901. 94 pages. I.
- RECONNAISSANCE OF THE GEOLOGY AND MINERAL RESOURCES OF PRINCE WILLIAM SOUND, ALASKA. By U. S. Grant and D. F. Higgins. U. S. G. S., Bull. 443. 89 pages. I. 1910.
- GEOLOGY AND MINERAL RESOURCES OF THE SOLOMON AND CASADEPAGO QUADRANGLES, SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 433. 234 pages. I.
- NOTES ON THE GEOLOGY AND MINERAL PROSPECTS IN THE VICINITY OF SEWARD, KENAI PENINSULA. By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 98. 10 pages. I. 1908.
- GEOLOGY AND MINERAL RESOURCES OF IRON CREEK, ALASKA. By P. S. Smith. U. S. G. S., Bull. 314, p. 157. 7 pages. I. 1906.
- GEOLOGY AND MINERAL RESOURCES OF THE CONTROLLER BAY REGION, ALASKA. By G. C. Martin. U. S. G. S., Bull. 335. 141 pages. I. 1908.
- GENERAL GEOLOGY, AND ECONOMIC GEOLOGY, ALASKA. U. S. G. S., 21st Ann. Rept., pt. 2. 522 pages. I.
- RECONNAISSANCE IN SOUTHWESTERN ALASKA IN 1898. By J. E. Spurr. U. S. G. S., 20th Ann. Rept., pt. 7, pp. 31-264. 1898-99. I.
- RECONNAISSANCE IN SUSHITNA BASIN AND ADJACENT TERRITORY, ALASKA. By C. H. Eldridge. U. S. G. S., 20th Ann. Rept., pt. 7, pp. 1-29. 1898-99. Maps.
- See also ALASKA.
- GEOLOGIC RECONNAISSANCE OF A PART OF WESTERN ARIZONA. By W. T. Lee. U. S. G. S., Bull. 352. 96 pages. I. 1908.
- See also ARIZONA.
- HISTORICAL SKETCH OF THE GEOLOGICAL RELATIONS OF AUSTRALIA AND TASMANIA. By R. M. Johnston. T. Au. I. M. E., vol. 3, p. 256. 28 pages. D.
- See also TASMANIA.
- SOME GEOLOGICAL CONSIDERATIONS AFFECTING WESTERN AUSTRALIAN ORE-DEPOSITS. By A. Montgomery. T. Au. I. M. E., vol. 13, p. 160. 32 pages. I.
- THE ECONOMIC GEOLOGY OF NEW ZEALAND. By J. M. Bell. T. Au. I. M. E., vol. 13, p. 66. 20 pages. I. Map.
- See also NEW ZEALAND.
- THE GEOLOGY AND ORE DEPOSITS OF FRANKLIN CAMP, BRITISH COLUMBIA. By R. W. Brock. J. C. M. I., vol. 10, p. 170. 10 pages. I.
- NOTES ON MOTHER LODE IN BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 88, p. 1101. 7 columns. I.
- OBSERVATIONS ON THE GEOLOGY AND ORE DEPOSITS OF CAMP HEDLEY,

- BRITISH COLUMBIA.** By C. Cam-sell. J. C. M. I., vol. 11, p. 423. 10 pages. Maps.
- SIR WM. E. LOGAN AND THE GEOLOGICAL SURVEY OF CANADA.** By R. Bell. J. C. M. I., vol. 10, p. 342. 28 pages. I.
- NOTES ON GEOLOGICAL STRUCTURE AT THE RICHARDSON MINE AS SHOWN BY PLANS AND MODELS OF THE SAME, UPPER SEAL HARBOUR, NOVA SCOTIA.** By E. Percy Brown. J. M. Soc. N. S., vol. 13, p. 17. 10 pages. I.
- ORE DEPOSITS IN WESTERN ONTARIO.** E. & M. J., vol. 90, p. 325. 3 columns.
- NORTH CAROLINA: Its Geology, Mining Regions, Scenery, Etc.** By J. Eights. Min. Mag., vol. 10, p. 183, 5½ pages; p. 268, 5 pages; p. 369, 4½ pages; p. 423, 4 pages.
- See also **THE CAROLINAS.**
- GEOLOGICAL AND MINING NOTES ON CHINA.** By A. Hassam. T. I. M. E., vol. 36, p. 353. 12 pages.
- See also **CHINA.**
- DESCRIPTIVE GEOLOGY OF NEVADA SOUTH OF THE FORTIETH PARALLEL AND ADJACENT PORTIONS OF CALIFORNIA.** By J. E. Spurr. U. S. G. S., Bull. 208. 229 pages. I. 1903.
- NOTES ON THE GEOLOGY OF NORTHERN CALIFORNIA.** By J. S. Diller. U. S. G. S., Bull. 33. 23 pages. 1886.
- GEOLOGY OF SAN CLEMENTS ISLAND, CALIFORNIA.** By W. S. T. Smith. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 459-496. 1896-97. I.
- SKETCH OF GEOLOGY OF SAN FRANCISCO PENINSULA.** By A. C. Lawson. U. S. G. S., 15th Ann. Rept., pp. 399-476. 1893-94. I.
- HISTORICAL GEOLOGY OF CALIFORNIA.** By W. Forstner. Min. & Sci. Press, vol. 98, p. 853, 10½ columns, I.; p. 891, 4 columns, I.; vol. 99, p. 55, 6½ columns; p. 91, 3½ columns.
- See also **CALIFORNIA.**
- GEOLOGICAL DISTRIBUTION OF THE PRECIOUS METALS IN COLORADO.** By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 89, 11 columns, I.; p. 150, 8 columns, I.; p. 316, 9½ columns, I.
- NOTES ON THE ECONOMIC GEOLOGY OF SOUTHEASTERN GUNNISON COUNTY, COLORADO.** By J. M. Hill. U. S. G. S., Bull. 380, p. 21. 20 pages. I. 1908.
- ON GEOLOGY AND PHYSIOGRAPHY OF A PORTION OF NORTHWESTERN COLORADO AND ADJACENT PARTS OF UTAH AND WYOMING.** By C. A. White. U. S. G. S., 9th Ann. Rept., pp. 677-712. 1887-88. I.
- GEOLOGY OF THE BOULDER DISTRICT, COLORADO.** By N. M. Fenneman. U. S. G. S., Bull. 265. 101 pages. 1905.
- GEOLOGY OF THE DENVER BASIN IN COLORADO.** By S. F. Emmons. U. S. G. S., Monograph XXVII. 556 pages. I. 1896.
- GEOLOGICAL SECTION OF LEADVILLE, COLORADO.** Min. & Sci. Press, vol. 96, p. 60. I.
- See also **COLORADO.**
- GEOLOGICAL RECONNAISSANCE ACROSS IDAHO.** By G. H. Eldridge. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 211-276. 1894-95. I.
- NOTES ON GEOLOGY OF SNOW STORM MINE, IDAHO.** By G. Huston. E. & M. J., vol. 90, p. 1109. 3 columns.
- ORE BODIES OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT.** E. & M. J., vol. 86, p. 67. 4 columns. I.
- THE OREBODIES OF THE BUNKER HILL AND SULLIVAN MINE.** Min. & Sci. Press, vol. 97, p. 775. 6 columns. I.
- GEOLOGY OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT.** E. & M. J., vol. 86, p. 66. 2 columns.
- See also **IDAHO.**
- GEOLOGY OF JAMAICA, AS RELATED TO ITS HISTORY.** By R. W. Raymond. Min. & Sci. Press, vol. 95, p. 145. 3½ columns.

220 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- THE GEOLOGY OF THE FORT RILEY MILITARY RESERVATION AND VICINITY, KANSAS. By R. Hay. U. S. G. S., Bull. 137. 35 pages. I. 1896.
- A GEOLOGICAL RECONNAISSANCE IN SOUTHWESTERN KANSAS. By R. Hay. U. S. G. S., Bull. 57. 42 pages. I. 1890.
- See also KANSAS.
- ECONOMIC GEOLOGY OF THE IOLA QUADRANGLE, KANSAS. By G. I. Adams, E. Haworth, and W. R. Crane. U. S. G. S., Bull. 238. 83 pages. I. 1904.
- ECONOMIC GEOLOGY OF THE INDEPENDENCE QUADRANGLE, KANSAS. By F. C. Schrader and E. Haworth. U. S. G. S., Bull. 296. 74 pages. I. 1906.
- CONTRIBUTIONS TO THE GEOLOGY OF MAINE. By H. S. Williams and H. E. Gregory. U. S. G. S., Bull. 165. 212 pages. I. 1900.
- THE GEOLOGY OF THE PERRY BASIN IN SOUTHEASTERN MAINE. By G. O. Smith. U. S. G. S., Professional Paper 35. 107 pages. I. 1905.
- GEOLOGY OF THE ISLAND OF MOUNT DESERT, MAINE. By N. S. Shaler. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 987-1061. 1886-87. I.
- See also MAINE.
- THE EOCENE DEPOSITS OF THE MIDDLE ATLANTIC SLOPE IN DELAWARE, MARYLAND, AND VIRGINIA. By W. B. Clark. U. S. G. S., Bull. 141. 167 pages. I. 1896.
- THE GEOLOGY OF EASTERN BERKSHIRE COUNTY, MASSACHUSETTS. By B. K. Emerson. U. S. G. S., Bull. 159. 139 pages. I. 1899.
- GEOLOGY OF OLD HAMPSHIRE COUNTY, MASSACHUSETTS, AND OTHERS. By B. K. Emerson. U. S. G. S., Monograph XXIX. 790 pages. I. 1898.
- GEOLOGY OF CAPE ANN, MASSACHUSETTS. By N. S. Shaler. U. S. G. S., 9th Ann. Rept., pp. 529-611. 1887-88. I.
- GEOLOGY OF CAPE COD, MASSACHUSETTS. By N. S. Shaler. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 497-594. 1896-97. I.
- See also MASSACHUSETTS.
- GROWTH AND DECAY OF THE MEXICAN PLATEAU. By R. T. Hill. E. & M. J., vol. 85, p. 681. 22½ columns. I.
- GEOLOGIC STUDY OF THE SIERRA OF GUANAJUATO. E. & M. J., vol. 88, p. 672. 12 columns. I.
- HOSTOTIPAQUILLO AND THE LERMA RIVER, MEXICO. By E. Ordoñez. Min. & Sci. Press, vol. 97, p. 705. 7½ columns. I.
- GEOLOGY OF NORTHERN MEXICO. By R. H. Burrows. Min. & Sci. Press, vol. 99, p. 290, 10 columns, I.; p. 324, 8 columns, I.
- A GEOLOGICAL JOURNEY IN GUERRERO, MEXICO. By J. W. Finch. Min. & Sci. Press, vol. 101, p. 496. 9 columns.
- GEOLOGICAL NOTES ON WEST COAST OF MEXICO. By C. W. Botsford. E. & M. J., vol. 89, p. 223. 6 columns.
- See also MEXICO.
- THE PENOKEE IRON-BEARING SERIES OF MICHIGAN AND WISCONSIN. By R. D. Irving and C. R. Van Hise. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 341-507. 1888-89. I.
- GEOLOGY AND MINERAL RESOURCES OF MISSISSIPPI. By A. F. Crider. U. S. G. S., Bull. 283. 99 pages. I. 1906.
- A SKETCH OF THE GEOLOGY OF THE STATE OF MISSISSIPPI. By O. M. Lieber. Min. Mag., vol. 3, p. 41. 5 pages. I.
- See also MISSISSIPPI.
- GEOLOGY OF MISSOURI. By J. Hawes. Min. Mag., vol. 5, p. 382. 12½ pages.
- NOTES ON THE MINERAL DEPOSITS OF THE BEARPAW MOUNTAINS, MON-

- TANA. By L. J. Pepperberg. U. S. G. S., Bull. 430, p. 135. 12 pages. I. 1909.
- GEOLOGY AND PALEONTOLOGY OF THE JUDITH RIVER BEDS. By T. W. Stanton and J. B. Hatcher. U. S. G. S., Bull. 257. 174 pages. I. 1905
- See also MONTANA.
- SOME ORE DEPOSITS OF MAINE AND THE MILAN MINE, NEW HAMPSHIRE. By W. H. Emmons. U. S. G. S., Bull. 432. 62 pages. I.
- GEOLOGY OF THE MOGOLLONS, NEW MEXICO. E. & M. J., vol. 88, p. 63. 1½ columns.
- See also NEW MEXICO.
- THE RENSSELAER GRIT PLATEAU IN NEW YORK. By T. N. Dale. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 291-340. 1891-92. I.
- THE ECONOMIC GEOLOGY OF NORTHERN NEW YORK. By F. S. Mills. E. & M. J., vol. 85, p. 396. 7 columns. I.
- GEOLOGY OF THE HUDSON VALLEY BETWEEN THE HOOSIC AND THE KINDERHOOK. By T. N. Dale. U. S. G. S., Bull. 242. 63 pages. I. 1904.
- THE CONFIGURATION OF THE ROCK FLOOR OF GREATER NEW YORK. By W. H. Hobbs. U. S. G. S., Bull. 270. 96 pages. I. 1905.
- See also NEW YORK.
- NOTES ON THE GEOLOGY OF SOUTHWESTERN IDAHO AND SOUTHEASTERN OREGON. By I. C. Russell. U. S. G. S., Bull. 217. 83 pages. I. 1903.
- GEOLOGICAL RECONNAISSANCE IN NORTHWESTERN OREGON. By J. S. Diller. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 441-520. 1895-96. I.
- GEOLOGICAL RECONNAISSANCE IN SOUTHERN OREGON. By I. C. Russell. U. S. G. S., 4th Ann. Rept., pp. 431-464. 1882-83. I.
- See also OREGON.
- DESCRIPTION OF THE GEOLOGY OF THE SCHUYLKILL COUNTY, PENNSYLVANIA. By P. W. Sheaffer. Min. Mag., vol. 2, p. 626. 4½ pages.
- See also PENNSYLVANIA.
- ECONOMIC GEOLOGY OF THE AMITY QUADRANGLE IN EASTERN WASHINGTON COUNTY, PENNSYLVANIA. By F. G. Clapp. U. S. G. S., Bull. 300. 145 pages. I. 1907.
- ECONOMIC GEOLOGY OF THE BEAVER QUADRANGLE, PENNSYLVANIA. By L. H. Woolsey. U. S. G. S., Bull. 286. 132 pages. I. 1906.
- GENERAL GEOLOGY OF THE PHILIPPINES. U. S. G. S., 21st Ann. Rept., pt. 3, p. 644, 1899-1900, I.; pt. 3, pp. 487-628, I.
- See also THE PHILIPPINES.
- PHYSIOGRAPHY OF THE CHATTANOOGA DISTRICT IN TENNESSEE, GEORGIA, AND ALABAMA. By C. W. Hayes. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 1-58. 1897-98. I.
- See also GEORGIA and ALABAMA.
- A SKETCH OF THE GEOLOGY OF TENNESSEE. By R. O. Currey. Min. Mag., vol. 9, p. 34. 10 pages.
- See also TENNESSEE.
- THE PRESENT CONDITION OF KNOWLEDGE OF THE GEOLOGY OF TEXAS. By R. T. Hill. U. S. G. S., Bull. 45. 95 pages. 1887.
- GEOLOGY OF THE BLACK AND GRAND PRAIRIES, TEXAS. By R. T. Hill. U. S. G. S., 21st Ann. Rept., pt. 7. 666 pages. 1899-1900. I.
- GEOLOGY OF PORTIONS OF THE EDWARDS PLATEAU AND RIO GRANDE PLAIN ADJACENT TO SAN ANTONIO, TEXAS. By R. T. Hill and T. W. Vaughn. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 193-322. 1896-97. I.
- See also TEXAS.
- GEOLOGY OF THE RICHMOND BASIN, VIRGINIA. By N. S. Shaler. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 385-519. 1897-98. I.
- See also VIRGINIA.
- CONTRIBUTIONS TO THE GEOLOGY OF WASHINGTON: Geology and Physiography of Central Washington. By

222 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- G. O. Smith. U. S. G. S., Professional Paper 19. 101 pages. I. 1903.
- A GEOLOGICAL RECONNAISSANCE IN CENTRAL WASHINGTON. By I. C. Russell. U. S. G. S., Bull. 108. 108 pages. I. 1893.
- See also WASHINGTON.
- NOTES ON SOME ORE DEPOSITS OF PORTO RICO. By S. H. Hamilton. E. & M. J., vol. 88, p. 518. 4 columns. I.
- GEOLOGIC SECTION ALONG THE NEW AND KANAWHA RIVERS IN WEST VIRGINIA. By M. R. Campbell and W. C. Mendenhall. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 473-511. 1895-96. I.
- See also WEST VIRGINIA.
- ECONOMIC GEOLOGY OF THE KENOVA QUADRANGLE (KENTUCKY-OHIO-WEST VIRGINIA). By W. C. Phalen. U. S. G. S., Bull. 349. 158 pages. I. 1908.
- GEOLOGY OF WISCONSIN. By J. G. Percival. Min. Mag., vol. 4, p. 345, 18 pages; vol. 5, p. 113, 14 pages; p. 217, 12 pages.
- GEOLOGY AND MINERAL RESOURCES OF THE LARAMIE BASIN, WYOMING. By N. H. Darton and C. E. Siebenthal. U. S. G. S., Bull. 364. 81 pages. I. 1909.
- A GEOLOGICAL RECONNAISSANCE IN NORTHWEST WYOMING. By G. H. Eldridge. U. S. G. S., Bull. 119. 72 pages. I. 1894.
- See also WYOMING.
- PHYSICAL GEOLOGY OF GRAND CANYON DISTRICT. By C. E. Dutton. U. S. G. S., 2d Ann. Rept., pp. 47-166. 1880-81. I.
- MOUNT TAYLOR AND THE ZUÑI PLATEAU. By C. E. Dutton. U. S. G. S., 6th Ann. Rept., pp. 105-198. 1884-85. I.
- GEOLOGY OF HEAD OF CHESAPEAKE BAY. By W. J. McGee. U. S. G. S., 7th Ann. Rept., pp. 537-646. 1885-86. I.
- GEOLOGY OF THE CATOCHIN BELT. By A. Keith. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 285-395. 1892-93. I.
- FURTHER CONTRIBUTIONS TO GEOLOGY OF SIERRA NEVADA. By H. W. Turner. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 521-762. 1895-96. I.
- SOME NOTES ON THE ECONOMIC GEOLOGY OF THE SKIENA RIVER. By W. W. Leach. J. C. M. I., vol. 10, p. 218. 11 pages. Map.
- THE GEOLOGY OF NANTUCKET. By N. S. Shaler. U. S. G. S., Bull. 53. 55 pages. I. 1889.
- GEOLOGY OF THE NARRAGANSETT BASIN. By N. S. Shaler and others. U. S. G. S., Monograph XXXIII. 202 pages. I. 1899.
- GEOLOGY OF THE YELLOWSTONE NATIONAL PARK. By J. P. Iddings, W. H. Weed, C. D. Wolcott and others. U. S. G. S., Monograph XXXII. 893 pages. I. 1899.
- PRELIMINARY REPORT ON THE GEOLOGY OF NEBRASKA WEST OF THE ONE HUNDRED AND THIRD MERIDIAN. By N. H. Darton. U. S. G. S., Professional Paper 17. 69 pages. I. 1903.
- REPORT ON GEOLOGY OF MARTHAS VINEYARD. By N. S. Shaler. U. S. G. S., 7th Ann. Rept., pp. 297-363. 1885-86. I.
- GEOLOGY OF LASSEN PEAK DISTRICT. By J. S. Diller. U. S. G. S., 8th Ann. Rept., pt. 1, pp. 395-432. 1886-87. I.
- THE GEOLOGY OF THE LITTLE WHIN SILL, WEARDALE, COUNTY DURHAM. By W. M. Egglestone. T. I. M. E., vol. 39, p. 18. 33½ pages. I.
- YOGO, AND OTHER DISTRICTS. By W. H. Weed. U. S. G. S., 20th Ann. Rept., pt. 3, pp. 257-581. 1898-99. I.
- See also SOURCE AND SUPPLY OF WATER

Glaciers

- EXISTING GLACIERS OF THE UNITED STATES.** By I. C. Russell. U. S. G. S., 5th Ann. Rept., pp. 303-355. 1883-84. I.
- GLACIER BAY AND ITS GLACIERS, ALASKA.** By H. F. Reid. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 415-461. 1894-95. I.
- GLACIERS OF MOUNT RAINIER.** By I. C. Russell. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 349-424. 1896-97. I.
- GLACIAL SCULPTURE OF BIGHORN MOUNTAINS, WYOMING.** By F. E. Matthes. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 167-190. 1899-1900. I.
- THE YAKUTAT BAY REGION, ALASKA: Physiography and Glacial Geology.** By R. S. Tarr. U. S. G. S., Professional Paper 64. 183 pages. I. 1909.
- GLACIAL BRICK CLAYS OF RHODE ISLAND AND SOUTHEASTERN MASSACHUSETTS.** By N. S. Shaler. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 951-1004. 1895-96. I.
- THE GLACIAL BOUNDARY IN WESTERN PENNSYLVANIA, OHIO, KENTUCKY, INDIANA, AND ILLINOIS.** By G. F. Wright. U. S. G. S., Bull. 58. 112 pages. I. 1890.
- DELAWARE LOBE OF THE LAKE MICHIGAN GLACIER OF THE WISCONSIN STAGE OF GLACIATION AND ASSOCIATED PHENOMENA.** By W. C. Alden. U. S. G. S., Professional Paper 34. 106 pages. I. 1905.
- GEOLOGICAL HISTORY OF LAKE LAHONTAN, A QUATERNARY LAKE OF NORTHWESTERN NEVADA.** By I. C. Russell. U. S. G. S., Monograph XI. 288 pages. I. 1885.
- THE GLACIAL LAKE AGASSIZ.** By W. Upham. U. S. G. S., Monograph XXV. 658 pages. I. 1896.
- THE UPPER BEACHES AND DELTAS OF THE GLACIAL LAKE AGASSIZ.** By W. Upham. U. S. G. S., Bull. 39. 84 pages. I. 1887.
- GLACIATION OF THE YELLOWSTONE VALLEY NORTH OF THE PARK.** By W. H. Weed. U. S. G. S., Bull. 104. 41 pages. I. 1893.
- GLACIAL FORMATIONS AND DRAINAGE FEATURES OF THE ERIE AND OHIO BASINS.** By F. Leverett. U. S. G. S., Monograph XLI. 802 pages. I. 1902.
- CHANGES IN RIVER COURSES IN WASHINGTON TERRITORY DUE TO GLACIATION.** By B. Willis. U. S. G. S., Bull. 40. 10 pages. I. 1887.
- THE MONTANA LOBE OF THE KEWATIN ICE SHEET.** By F. H. H. Calhoun. U. S. G. S., Professional Paper 50. 62 pages. I. 1906.
- THE ILLINOIS GLACIAL LOBE.** By F. Leverett. U. S. G. S., Monograph XXXVIII. 817 pages. I. 1899.
- THE MORAINES OF SOUTHEASTERN SOUTH DAKOTA AND THEIR ATTENDANT DEPOSITS.** By J. E. Todd. U. S. G. S., Bull. 158. 171 pages. I. 1899.
- PRELIMINARY PAPER ON TERMINAL MORAINES OF SECOND GLACIAL EPOCH.** By T. C. Chamberlin. U. S. G. S., 3d Ann. Rept., pp. 291-402. 1881-82. I.
- PRELIMINARY PAPER ON DRIFTLESS AREA OF UPPER MISSISSIPPI VALLEY.** By T. C. Chamberlin and R. D. Salisbury. U. S. G. S., 6th Ann. Rept., pp. 199-322. 1884-85. I.
- THE MORAINES OF THE MISSOURI COTEAN AND THEIR ATTENDANT DEPOSITS.** By J. E. Todd. U. S. G. S., Bull. 144. 71 pages. I. 1896.
- VALUE OF GEOLOGICAL WORK IN LIMESTONE REGIONS.** By C. T. Rice. E. & M. J., vol. 90, p. 1161. 8 columns.
- THE GLACIAL GRAVELS OF MAINE AND THEIR ASSOCIATED DEPOSITS.** By G. H. Stone. U. S. G. S., Monograph XXXIV. 499 pages. I. 1899.

224 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

ROCK SCORINGS OF THE GREAT ICE INVASIONS. By T. C. Chamberlin. U. S. G. S., 7th Ann. Rept., pp. 147-248. 1885-86. 1.

Geology of Fuel and Ores

GEOLOGY OF NEVADA'S NEW GOLD CAMP—ALUNITE. E. & M. J., vol. 86, p. 1203. 5 columns.

MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD. By J. C. T. Raspass. T. I. M. E., vol. 36, p. 119. 5 pages.

See also OCCURRENCE OF ASPHALT.

GEOLOGY OF THE VIRGINIA BARITE-DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

See also OCCURRENCE OF BARITE.

STRATIGRAPHY OF THE BITUMINOUS COAL FIELD OF PENNSYLVANIA, OHIO AND WEST VIRGINIA. By I. C. White. U. S. G. S., Bull. 65. 212 pages. I. 1891.

GEOLOGY OF THE GREAT FALLS COAL FIELD OF MONTANA. By C. A. Fisher. U. S. G. S., Bull. 356. 87 pages. I. 1909.

GEOLOGY OF THE LEWISTON COAL FIELD, MONTANA. By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909.

GEOLOGY OF THE WEST VIRGINIA COAL-FIELDS. M. & M., vol. 29, p. 303. 6 columns.

GEOLOGY OF THE LA VITA COAL FIELD. By A. Lakes. M. & M., vol. 31, p. 466. 5½ columns. I.

GEOLOGY OF HERRIN QUADRANGLE. By T. E. Savage. M. & M., vol. 31, p. 527. 9½ columns. I.

See also OCCURRENCE OF COAL.

GEOLOGY OF THE CENTRAL COPPER REGION, ALASKA. By W. C. Mendenhall. U. S. G. S., Professional Paper 41. 133 pages. I. 1906.

GEOLOGY OF THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol. 89, p. 870. 5 columns.

GEOLOGY OF THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol. 89, p. 769. 5 columns.

GEOLOGY AT GLOBE, ARIZONA. By F. L. Ransome. Min. & Sci. Press, vol. 100, p. 256. 4 columns.

GEOLOGY OF THE FIELD (MOUNT LYE) AND ITS MINES: Copper. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 54. 7½ pages.

GEOLOGY OF THE COPPER DEPOSITS NEAR MONTPELIER, BEAR LAKE COUNTY, IDAHO. By H. S. Gale. U. S. G. S., Bull. 430, p. 112. 9 pages. I. 1909.

GEOLOGY OF THE RAY MINES, NEVADA. M. & M., vol. 29, p. 544. 1½ columns.

See also OCCURRENCE OF COPPER.

GEOLOGY OF THE ARKANSAS DIAMOND FIELDS. E. & M. J., vol. 87, p. 153. 3 columns.

GEOLOGY OF THE BAHIA DIAMOND FIELDS, BRAZIL. E. & M. J., vol. 87, p. 982. 10 columns. I.

See also OCCURRENCE OF DIAMONDS.

THE GEM BEARING PEGMATITES OF WESTERN MAINE. By W. R. Wade. E. & M. J., vol. 87, p. 1127. 7½ columns. I.

GEOLOGY OF GEM DEPOSITS. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.

SKETCH OF THE GEOLOGY OF THE NORTHEASTERN PART OF THE FAIRBANKS QUADRANGLE, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 442. p. 203. 6 pages. I. 1909.

THE INDICATORS OF THE DAYLESFORD GOLD MINES, VICTORIA. By W. H. Vale. T. Au. I. M. E., vol. 10, p. 340. 12 pages. I.

THE GEOLOGY OF NORTHWESTERN TASMANIA, AUSTRALIA. T. Au. I. M. E., vol. 10, p. 38. 2½ pages.

"INDICATORS" IN AUSTRALIAN MINES. By W. Bradford. T. Au. I. M. E., vol. 4, p. 121. 2½ pages. I.

- CONTACTS IN VICTORIAN MINES. By W. H. Ferguson. T. A. I. M. E., vol. 6, p. 34. 2 pages.
- GEOLOGY OF THE CENTRE STAR MINES, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 17. 2 columns.
- GEOLOGY OF THE EXPOSED TREASURE LODGE, MOJAVE, CALIFORNIA. By C. De Kalb. T. A. I. M. E., vol. 38, p. 310. 10 pages. I.
- GEOLOGY OF THE YELLOW ASTER MINE, CALIFORNIA. By W. H. Storms. E. & M. J., vol. 87, p. 1277. 12 columns. I.
- NOTES ON THE GEOLOGY OF THE PORCUPINE DISTRICT. E. & M. J., vol. 90, p. 348. 2½ columns. Map.
- GENETIC AND STRUCTURAL RELATIONS OF THE EASTERN GOLD-BELT OF NORTH CAROLINA. T. A. I. M. E., vol. 38, p. 851. 4 pages.
- GEOLOGY OF THE FALL RIVER ORE DEPOSITS, COLORADO. M. & M., vol. 29, p. 294. 1½ columns.
- GEOLOGY OF RAWHIDE DISTRICT, NEVADA. E. & M. J., vol. 87, p. 345. 1 column.
- THE GEOLOGICAL AND PHYSICAL CONDITION OF TONOPAH MINES. By W. P. Jenney. E. & M. J., vol. 89, p. 29. 3½ columns.
- GEOLOGY OF THE JARBRIDGE MINING DISTRICT. By N. W. Sweetser. Min. & Sci. Press, vol. 101, p. 871. 2½ columns. I.
- A TERTIARY RIVER CHANNEL NEAR CARSON CITY, NEVADA. By J. A. Reid. Min. & Sci. Press, vol. 96, p. 522. 7½ columns. I.
- GEOLOGICAL POSSIBILITIES AT GOLDFIELD. By A. Becker. Min. & Sci. Press, vol. 96, p. 846. 2 columns. I.
- GEOLOGY OF THE MANHATTAN DISTRICT, NEVADA. By W. P. Jenney. E. & M. J., vol. 88, p. 82. 6 columns.
- REPORT ON GEOLOGY OF EUREKA DISTRICT, NEVADA. By A. Hague. U. S. G. S., 3d Ann. Rept., pp. 237-290. 1881-82. I.
- GEOLOGY OF THE TONOPAH MINING DISTRICT, NEVADA. By J. E. Spurr. U. S. G. S., Professional Paper 42, 295 pages. I. 1905.
- GEOLOGY OF THE FORTUNA MINE, BINGHAM, UTAH. E. & M. J., vol. 86, p. 1191. 7 columns.
- GEOLOGY OF THE FRENCH GUIANA GOLDFIELDS. T. A. I. M. E., vol. 41, p. 574. 1 page.
- GEOLOGY OF KOLAR GOLD FIELD. By C. S. Durand. M. & M., vol. 31, p. 350. 2½ columns.
- THE GEOLOGY OF THE COFFEE CREEK MINING DISTRICT. By N. S. Stines. Min. & Sci. Press, vol. 95, p. 25. 2½ columns.
- See also OCCURRENCE OF GOLD.
- GEOLOGY OF THE LORRAINE OÖLITIC IRON ORE DEPOSITS, FRANCE. E. & M. J., vol. 87, p. 1222. 6 columns. I.
- THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON-ORES. By H. Sjögren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- See also OCCURRENCE OF IRON ORES.
- GEOLOGY OF THE SOUTHEAST MISSOURI LEAD DISTRICT. By H. A. Wheeler. E. & M. J., vol. 89, p. 465. 4½ columns.
- GEOLOGY OF THE ORE DEPOSITS OF THE CŒUR D'ALENE DISTRICT, IDAHO. E. & M. J., vol. 88, p. 1056. 9 columns. I.
- REPORT ON GEOLOGY AND MINING INDUSTRY OF LEADVILLE, COLORADO. By S. F. Emmons. U. S. G. S., 2d Ann. Rept., pp. 201-290. 1880-81. I.
- See also OCCURRENCE OF LEAD.
- THE GEOLOGY OF PETROLEUM. M. & M., vol. 31, p. 607. 4½ columns. I.
- GEOLOGY OF OIL AND GAS. By E. Haworth. M. & M., vol. 30, p. 52. 4½ columns. I.
- GEOLOGY AND OIL RESOURCES OF THE COALINGA DISTRICT, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.

226 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- GEOLOGY OF THE COALINGA OILFIELD.** M. & M., vol. 31, p. 4. 5 columns. I.
- GEOLOGY OF THE COALINGA OIL DISTRICT.** By W. Forstner. Min. & Sci. Press, vol. 99, p. 566. 2 columns. Map.
- THE WORKING OF OIL-SHALE AT PUMPHERSTON, SCOTLAND.** By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.
- See also OCCURRENCE OF PETROLEUM.
- SUMMARY OF GEOLOGY OF QUICKSILVER DEPOSITS OF PACIFIC SLOPE.** By G. F. Becker. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 961-985. 1886-87. I.
- See also OCCURRENCE OF QUICKSILVER.
- A GEOLOGICAL ANALYSIS OF THE SILVER PRODUCTION OF THE UNITED STATES IN 1906.** By W. Lindgren. U. S. G. S., Bull. 340, p. 23. 11 pages. 1907.
- GEOLOGY OF THE PEAKS SILVER FIELD, NEW SOUTH WALES.** By C. O. G. Lecombe. T. Au. I. M. E., vol. 11, p. 122. 6 pages. I.
- SUMMARY OF GEOLOGY OF COMSTOCK LODGE AND WASHOE DISTRICT.** By G. F. Becker. U. S. G. S., 2d Ann. Rept., pp. 291-330. 1880-81. I.
- GEOLOGY OF THE WHITE PINE MINING DISTRICT, NEVADA.** M. & M., vol. 29, p. 521. 5 columns.
- GEOLOGY OF THE COBALT DISTRICT.** E. & M. J., vol. 87, p. 1267. 2 columns.
- THE GEOLOGY OF COBALT.** E. & M. J., vol. 86, p. 711. 3½ columns.
- GEOLOGY OF THE FREIBERG DISTRICT, GERMANY.** E. & M. J., vol. 87, p. 987. 1 column.
- GEOLOGY OF THE GUANAJUATO DISTRICT, MEXICO.** By C. W. Botsford. E. & M. J., vol. 87, p. 691. 9½ columns. I.
- GEOLOGY OF THE ZACATECAS DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 402. 4 columns. I.
- GEOLOGY OF THE PACHUCA AND REAL DEL MONTE SILVER DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 520. 4½ columns.
- GEOLOGY OF THE MINING DISTRICTS OF CHIHUAHUA, MEXICO.** By R. M. Bogg. Min. & Sci. Press, vol. 97, p. 152, 4 columns, I.; p. 187, 5½ columns, I.
- GEOLOGY OF HOSTOTIPAQUILLO ORE DEPOSITS.** By S. J. Lewis. Min. & Sci. Press, vol. 101, p. 335. 5½ columns. I.
- GEOLOGY OF THE EL TIGRE MINING DISTRICT, MEXICO.** M. & M., vol. 29, p. 485. ¼ column.
- GEOLOGY OF THE EL DOCTOR ORE DEPOSITS.** Min. & Sci. Press, vol. 95, p. 242. 1 column.
- See also OCCURRENCE OF SILVER.
- GEOLOGY OF THE SOUTH AFRICAN TIN FIELDS.** E. & M. J., vol. 89, p. 411. 3 columns. I.
- GEOLOGY OF THE CAPE PRINCE OF WALES TIN DEPOSITS.** Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.
- TIN MINING IN ULN SELANGER, FEDERATED MALAY STATES.** By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.
- See also OCCURRENCE OF TIN.

Fossil Animals and Plants

- BIRDS WITH TEETH.** By O. C. Marsh. U. S. G. S., 3d Ann. Rept., pp. 45-88. 1881-82.
- A REVIEW OF THE NONMARINE FOSSIL MOLLUSCA OF NORTH AMERICA.** By C. A. White. U. S. G. S., 3d Ann. Rept., pp. 403-550. 1881-82. I.
- REVIEW OF THE FOSSIL OSTREIDAE OF NORTH AMERICA AND A COMPARISON OF THE LIVING FORMS.** By C. A. White. U. S. G. S., 4th Ann. Rept., pp. 273-430. 1882-83. I.
- THE GIGANTIC MAMMALS OF THE ORDER DINOCERATA.** By O. C. Marsh. U. S. G. S., 5th Ann. Rept., pp. 243-302. 1883-84.

- FOSSIL BUTTERFLIES OF FLORISSANT.** By S. H. Scudder. U. S. G. S., 8th Ann. Rept., pt. 1, pp. 433-474. 1886-87. I.
- FAUNA OF THE LOWER CAMBRIAN OR OLENELLUS ZONE.** By C. D. Walcott. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 509-763. 1888-89. I.
- AMERICAN TERTIARY APHIDÆ.** By S. H. Scudder. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 341-366. 1891-92. I.
- DIANOSAURS OF NORTH AMERICA.** By O. C. Marsh. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 131-414. 1894-95. I.
- GENERAL GEOLOGY AND PALEONTOLOGY.** U. S. G. S., 20th Ann. Rept., pt. 2. 953 pages. 1898-99. I.
- DEVONIAN FOSSILS FROM SOUTHWESTERN COLORADO: the Fauna of the Ouray Limestone.** By G. H. Girty. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 25-81. 1898-99. I.
- THE STRATIGRAPHIC PALEONTOLOGY OF THE POTTSVILLE FORMATION IN THE SOUTHERN ANTHRACITE COAL FIELD, PENNSYLVANIA.** By D. White. U. S. G. S., 20th Ann. Rept. pt. 2, pp. 749-930. 1898-99. I.
- PALEONTOLOGY OF THE EUREKA DISTRICT.** By C. D. Walcott. U. S. G. S., Monograph VIII. 298 pages. I. 1884.
- A BRIEF CONTRIBUTION TO THE GEOLOGY AND PALEONTOLOGY OF NORTHWESTERN LOUISIANA.** By T. W. Vaughan. U. S. G. S., Bull. 142. 65 pages. I. 1896.
- STRATIGRAPHY AND PALEONTOLOGY OF UPPER CARBONIFEROUS ROCKS OF KANSAS SECTION.** By G. I. Adams, G. H. Girty, and D. White. U. S. G. S., Bull. 211. 123 pages. I. 1903.
- SKETCH OF PALEOBOTANY.** By L. F. Ward. U. S. G. S., 5th Ann. Rept., pp. 357-452. 1883-84. I.
- SYNOPSIS OF FLORA OF LARAMIE GROUP.** By L. F. Ward. U. S. G. S., 6th Ann. Rept., pp. 399-557. 1884-85. I.
- GEOGRAPHICAL DISTRIBUTION OF FOSSIL PLANTS.** By L. F. Ward. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 663-960. 1886-87. I.
- STATUS OF THE MESOZOIC FLORAS OF THE UNITED STATES.** By L. F. Ward. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 211-748. 1898-99. I.
- CONTRIBUTIONS TO THE KNOWLEDGE OF THE OLDER MESOZOIC FLORA OF VIRGINIA.** By W. M. Fontaine. U. S. G. S., Monograph VI. 144 pages. I. 1883.
- FOSSIL FLORA OF THE LOWER COAL MEASURES OF MISSOURI.** By D. White. U. S. G. S., Monograph XXXVII. 467 pages. I. 1899.
- Geologic Progress and Studies**
- GEOLOGY APPLIED TO MINING.** By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 479, 6 columns; p. 516, 5½ columns.
- THE POSSIBILITIES AND LIMITATIONS OF GEOLOGICAL SURVEY WORK AS APPLIED TO THE MINING INDUSTRY.** By G. O. Smith. Min. & Sci. Press, vol. 95, p. 652. 6 columns.
- GEOLOGY AND MINING.** By H. Bergmann. Min. Mag., vol. 10, p. 299, 8 pages; p. 365, 4 pages.
- ON THE STUDY OF GEOLOGY AND MINERALOGY AS SOURCES OF INTERESTING AND VALUABLE INFORMATION.** By G. Henwood. Min. Mag., vol. 8, p. 144. 12 pages.
- RADIOACTIVITY OF THE THERMAL WATERS OF YELLOWSTONE NATIONAL PARK.** By H. Schlundt and R. B. Moore. U. S. G. S., Bull. 395. 35 pages. I. 1909.
- CHART OF IGNEOUS ROCKS.** By S. Croasdale. Min. & Sci. Press, vol. 99, p. 598. 2½ columns.
- DEFINITIONS OF IGNEOUS ROCKS.** Min. & Sci. Press, vol. 97, p. 56. 1½ columns.

- ERUPTIVE ROCKS OF ELECTRIC PEAK AND SEPULCHRE MOUNTAIN, YELLOWSTONE NATIONAL PARK.** By J. P. Iddings. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 569-664. 1890-91. I.
- PRE-CAMBRIAN IGNEOUS ROCKS OF THE UNKAR TERRANE, GRAND CANYON OF THE COLORADO, ARIZONA.** By C. D. Walcott. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 497-524. 1892-93. I.
- THE RELATIONS OF THE TRAPS OF THE NEWARK SYSTEM IN THE NEW JERSEY REGION.** By N. H. Darton. U. S. G. S., Bull. 67. 82 pages. I. 1890.
- SOME LAVA FLOWS OF THE WESTERN SLOPE OF THE SIERRA NEVADA, CALIFORNIA.** By F. L. Ransome. U. S. G. S., Bull. 89. 74 pages. I. 1898.
- LACCOLITHS OF THE BLACK HILLS.** By T. A. Jaggar, Jr. U. S. G. S., 21st Ann. Rept., pt. 3, pp. 163-303. 1899-1900. I.
- A LATE VOLCANIC ERUPTION IN NORTHERN CALIFORNIA AND ITS PECULIAR LAVA.** By J. S. Diller. U. S. G. S., Bull. 79. 33 pages. I. 1891.
- THE LAWS OF INTRUSION.** By B. Stevens. T. A. I. M. E., vol. 41, p. 650. 20½ pages. I.
- EXPERIMENTS ILLUSTRATING INTRUSION AND EROSION.** By E. Howe. U. S. G. S., 21st Ann. Rept., pt. 3, pp. 163-303. 1899-1900. I.
- ASSOCIATION OF IGNEOUS INTRUSIONS WITH IDAHO ORE BODIES.** By R. N. Bell. E. & M. J., vol. 85, p. 127. 1½ columns.
- NOTE ON THE EFFECT OF AN IGNEOUS DYKE ON A NATAL COAL-SEAM.** By G. H. Stanley. T. I. M. E., vol. 36, p. 220. 2½ pages.
- THE DISTRIBUTION OF THE ELEMENTS IN IGNEOUS ROCKS.** By H. S. Washington. T. A. I. M. E., vol. 39, p. 735. 30 pages.
- THE IGNEOUS CHARACTER OF THE CARBONIFEROUS ROCKS OF THE TOKATEA GOLDFIELD, CAPE COVILLE PENINSULA.** By A. M'Kay. T. Au. I. M. E., vol. 9, p. 195. 10 pages.
- ON A GROUP OF VOLCANIC ROCKS FROM THE TEWAN MOUNTAINS, NEW MEXICO.** By J. P. Iddings. U. S. G. S., Bull. 66. 34 pages. 1890.
- VOLCANIC ROCKS OF SOUTH MOUNTAIN, PENNSYLVANIA.** By F. Bascom. U. S. G. S., Bull. 136. 124 pages. I. 1896.
- LODES IN THE TERTIARY ERUPTIVES OF COLORADO.** By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 180. 4½ columns. I.
- THE IGNEOUS ROCKS OF TASMANIA.** By W. H. Twelvetrees and W. F. Petterd. T. Au. I. M. E., vol. 5, p. 98. 16 pages. I.
- ON THE DEVELOPMENT OF CRYSTALLIZATION IN THE IGNEOUS ROCKS OF WASHOE, NEVADA, WITH NOTES ON THE GEOLOGY OF THE DISTRICT.** By A. Hague and J. P. Iddings. U. S. G. S., Bull. 17. 44 pages. 1885.
- THE GABBROS AND ASSOCIATED HORN-LENDE ROCKS OCCURRING IN THE NEIGHBORHOOD OF BALTIMORE, MARYLAND.** By G. H. Williams. U. S. G. S., Bull. 28. 78 pages. I. 1886.
- THE GABBROS AND ASSOCIATED ROCKS IN DELAWARE.** By F. D. Chester. U. S. G. S., Bull. 59. 45 pages. I. 1890.
- THE GNEISSES, GABBRO-SCHISTS, AND ASSOCIATED ROCKS OF SOUTHWESTERN MINNESOTA.** By C. W. Hall. U. S. G. S., Bull. 157. 160 pages. I. 1899.
- THE ERUPTIVE AND SEDIMENTARY ROCKS ON PIGEON POINT, MINNESOTA, AND THEIR CONTACT PHENOMENA.** By W. S. Bayley. U. S. G. S., Bull. 109. 121 pages. I. 1893.
- ROCKS OF SIERRA NEVADA.** By H. W. Turner. U. S. G. S., 14th Ann.

- Rept., pt. 2, pp. 435-495. 1892-93. I.
- GENERAL RELATIONS OF GRANITIC ROCKS IN THE MIDDLE ATLANTIC PIEDMONT PLATEAU. By G. H. Williams. U. S. G. S., 15th Ann. Rept., pp. 651-684. 1893-94. I.
- FLOW AND FRACTURE OF ROCKS AS RELATED TO STRUCTURE. By L. M. Hoskins. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 571-874. 1894-95. I.
- ON HYPERSTHENE ANDESITE AND ON TRICLINIC PYROXENE IN AUGITIC ROCKS. By W. Cross. U. S. G. S., Bull. 1. 42 pages. I. 1883.
- THE GREENSTONE-SCHIST AREAS OF THE MENOMINEE AND MARQUETTE REGIONS OF MICHIGAN. By G. H. Williams. U. S. G. S., Bull. 62. 241 pages. I. 1890.
- THE OCCURRENCE OF PRIMARY QUARTZ IN CERTAIN BASALTS. By J. P. Iddings. U. S. G. S., Bull. 66. 34 pages. 1890.
- THE CAMBRIAN ROCKS OF PENNSYLVANIA. By C. D. Walcott. U. S. G. S., Bull. 134. 43 pages. I. 1896.
- THE GREEN SCHISTS AND ASSOCIATED GRANITES AND PORPHYRIES OF RHODE ISLAND. By B. K. Emerson and J. H. Perry. U. S. G. S., Bull. 311. 74 pages. I. 1907.
- GEOLOGY AND PEGMATITES AND ASSOCIATED ROCKS OF MAINE, INCLUDING FELDSPAR, QUARTZ, MICA, AND GEM DEPOSITS. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.
- GEOLOGY OF FELDSPAR, QUARTZ, AND MICA. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.
- QUALITY OF BLUESTONE IN THE VICINITY OF THE ASHOKAN DAM. By C. P. Berkey. Sch. Mines Quart., vol. 29, p. 149. 11 pages. I.
- CONCERNING CERTAIN PERFORATED ROCKS IN THE COOLGARDIE DISTRICT. By F. D. Johnson. T. A. I. M. E., vol. 4, p. 42. 2½ pages.
- NOTES ON THE ARCHEAN ROCKS OF MEXICO. E. & M. J., vol. 90, p. 821. 4 columns.
- SECOND EXPEDITION TO MOUNT ST. ELIAS. By I. C. Russell. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 1-91. 1891-92. I.
- LACCOLITHIC MOUNTAIN GROUPS OF COLORADO, UTAH, AND ARIZONA. By W. Cross. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 157-241. 1892-93. I.
- PRELIMINARY REPORT ON THE GEOLOGY OF THE ARBUCKLE AND WICHITA MOUNTAINS, IN INDIAN TERRITORY AND OKLAHOMA. By J. A. Taff. U. S. G. S., Professional Paper 31. 97 pages. I. 1904.
- A GEOLOGICAL RECONNAISSANCE ACROSS THE BITTERROOT RANGE AND CLEARWATER MOUNTAINS IN MONTANA AND IDAHO. By W. Lindgren. U. S. G. S., Professional Paper 27. 123 pages. I. 1904.
- GEOLOGY OF THE BIGHORN MOUNTAINS. By N. H. Darton. U. S. G. S., Professional Paper 51. 129 pages. I. 1906.
- GEOLOGY OF THE GREEN MOUNTAINS IN MASSACHUSETTS. By R. Pumpelly and others. U. S. G. S., Monograph XXIII. 206 pages. I. 1894.
- A GEOLOGICAL RECONNAISSANCE ACROSS THE CASCADE RANGE NEAR THE FORTY-NINTH PARALLEL. By G. O. Smith and F. C. Calkins. U. S. G. S., Bull. 235. 103 pages. I. 1904.
- PETROGRAPHY AND GEOLOGY OF THE IGNEOUS ROCKS OF THE HIGHWOOD MOUNTAINS, MONTANA. By L. V. Pirsson. U. S. G. S., Bull. 237. 208 pages. I. 1905.
- GEOLOGY OF THE BURRO MOUNTAIN, TURQUOISE DISTRICT, NEW MEXICO. E. & M. J., vol. 86, p. 843. 3 columns.
- GEOLOGY OF THE SIERRA NEVADA, OR CALIFORNIA RANGE. By J. B.

230 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- Trask. Min. Mag., vol. 1, p. 6. 15 pages.
- THE GEOLOGY OF ASCUTNEY MOUNTAIN, VERMONT. By R. A. Daly. U. S. G. S., Bull. 209. 122 pages. I. 1903.
- MECHANICS OF APPALACHIAN STRUCTURE. By B. Willis. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 211-281. 1891-92. I.
- TOPOGRAPHIC DEVELOPMENT OF THE KLAMATH MOUNTAINS. By J. S. Diller. U. S. G. S., Bull. 196. 69 pages. I. 1902.
- A PRELIMINARY PAPER ON THE GEOLOGY OF THE CASCADE MOUNTAINS IN NORTHERN WASHINGTON. By I. C. Russell. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 83-210. 1898-99 I.
- STRUCTURE OF MONUMENT MOUNTAIN, GREAT BARRINGTON, MASSACHUSETTS. By T. N. Dale. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 551-565. I.
- STRUCTURAL DETAILS IN THE GREEN MOUNTAIN REGION AND IN EASTERN NEW YORK. By T. N. Dale. U. S. G. S., Bull. 195. 22 pages. I. 1902.
- STRUCTURAL DETAILS IN THE GREEN MOUNTAIN REGION AND IN EASTERN NEW YORK. By T. N. Dale. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 543-570. 1894-95.
- ON THE STRUCTURE OF THE RIDGE BETWEEN THE TACONIC AND GREEN MOUNTAIN RANGES, VERMONT. By T. N. Dale. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 525-549. 1892-93. I.
- ALTITUDES BETWEEN LAKE SUPERIOR AND THE ROCKY MOUNTAINS. By W. Upham. U. S. G. S., Bull. 72. 229 pages. 1891.
- AVERAGE ELEVATION OF THE UNITED STATES. By H. Gannett. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 283-289. 1891-92. I.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H. Gannett. U. S. G. S., Bull. 5. 325 pages. 1884.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H. Gannett. U. S. G. S., Bull. 76. 393 pages. 1891.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H. Gannett. U. S. G. S., Bull. 160. 775 pages. 1899.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H. Gannett. U. S. G. S., Bull. 274. 1072 pages. 1906.
- LATITUDES AND LONGITUDES OF CERTAIN POINTS IN MISSOURI, KANSAS, AND NEW MEXICO. By R. S. Woodward. U. S. G. S., Bull. 49. 133 pages. 1889.
- ELEVATIONS IN THE DOMINION OF CANADA. By J. W. Spencer. U. S. G. S., Bull. 6. 43 pages. 1884.
- ALTITUDES IN ALASKA. By H. Gannett. U. S. G. S., Bull. 169. 13 pages. 1900.
- ROCK CLEAVAGE. By C. K. Leith. U. S. G. S., Bull. 239. 216 pages. I. 1905.
- THE THEORY OF THE FORMATION OF CLEAVAGE LINES. E. & M. J., vol. 85, p. 212. 1 column.
- SYMMETRIC STRUCTURE IN LIMESTONE AND LAVAS. By R. H. Chapman. Min. & Sci. Press, vol. 98, p. 623. 3 columns. I.
- EXPERIMENTS ON SCHISTOSITY AND SLATY CLEAVAGE. By G. F. Becker. U. S. G. S., Bull. 241. 34 pages. I. 1904.
- NOMENCLATURE OF SHOOTS. By W. C. W. Pearce. T. Au. I. M. E., vol. 13, p. 129. 3½ pages.
- SURFACE ALTERATIONS OF GOLD ORES. By A. D. Brokaw. M. & M., vol. 31, p. 687. 3 columns.
- SURFACE INDICATIONS OF ORE-SHOOTS IN DEPTH. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 537. 4 columns.

- SURFACE INDICATIONS OF ORE-SHOOTS IN DEPTH.** By C. Janin. Min. & Sci. Press, vol. 101, p. 679, 2 columns, I.; p. 713, 1½ columns.
- OUTCROP OF OREBODIES.** By W. H. Emmons. Min. & Sci. Press, vol. 99, p. 751, 8 columns, I.; p. 782, 11½ columns, I.
- SUGGESTIONS FOR FIELD OBSERVATIONS OF ORE DEPOSITS.** By S. F. Emmons. Min. & Sci. Press, vol. 95, p. 18. 5½ columns.
- ORE DEPOSITS IN SERPENTINE.** By W. Forestner. Min. & Sci. Press, vol. 95, p. 121. 3½ columns.
- SOME REMARKS ON THE METALLIFEROUS VEINS OF THE SOUTH.** By O. M. Lieber. Min. Mag., vol. 5, p. 306. 5 pages. I.
- ORE SHOOTS AT BUTTE, MONTANA.** By R. H. Sales. E. & M. J., vol. 86, p. 226. 3½ columns.
- THE BLOW-OUT.** By F. L. Garrison. Min. & Sci. Press, vol. 95, p. 406, 3 columns, I.; p. 458, ½ column.
- AN INTERESTING STOCKWORK.** By I. F. Lancks. Min. & Sci. Press, vol. 101, p. 540. 1½ columns. I.
- STOCKWORKS.** By J. H. Collins. Min. & Sci. Press, vol. 101, p. 774. 1 column.
- DIP AND PITCH.** By R. W. Raymond. T. A. I. M. E., vol. 39, p. 326. 2 pages.
- DIP AND PITCH:** Discussion of the paper of Dr. R. W. Raymond, p. 326. T. A. I. M. E., vol. 39, p. 898. 18 pages. D.
- ROCK OXIDATION AT CRIPPLE CREEK.** By P. Argall. Min. & Sci. Press, vol. 96, p. 883. 9 columns. I.
- METAMORPHIC RANGES IN SONORA, MEXICO.** By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 296. 1 column.
- A TREATISE ON METAMORPHISM.** By C. R. Van Hise. U. S. G. S., Monograph XLVII. 1286 pages. I. 1904.
- DYNAMIC METAMORPHISM IN ERUPTIVE ROCKS.** By G. H. Williams. U. S. G. S., Bull. 62. 241 pages. I. 1890.
- EXPLORATION OF CONTACT METAMORPHIC ORE DEPOSITS.** By C. A. Stewart. E. & M. J., vol. 90, p. 513. 6½ columns.
- EROSION ON THE NORTHUMBERLAND STRATA.** By W. C. Milner. J. M. Soc. N. S., vol. 15, p. 111. 4½ pages.
- RATE OF RECESSION OF THE NIAGARA FALLS.** By G. K. Gilbert. U. S. G. S., Bull. 306. 31 pages. I. 1907.
- LAND SCULPTURE BY WIND-BLOWN SAND.** E. & M. J., vol. 85, p. 687. 2½ columns. I.
- DENUDATION AND EROSION IN THE SOUTHERN APPALACHIAN REGION AND THE MONONGAHELA BASIN.** By L. C. Glenn. U. S. G. S., Professional Paper 72. 137 pages. I. 1911.
- NOTES ON THE STRATIGRAPHY OF CALIFORNIA.** By G. F. Becker. U. S. G. S., Bull. 19. 28 pages. 1885.
- TERTIARY REVOLUTION IN TOPOGRAPHY OF PACIFIC COAST.** By J. S. Diller. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 397-434. 1892-93. I.
- TACONIC PHYSIOGRAPHY.** By T. N. Dale. U. S. G. S., Bull. 272. 52 pages. I. 1905.
- GEOLOGICAL HISTORY OF HARBORS.** By N. S. Shaler. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 93-209. 1891-92. I.
- ON THE FORM AND POSITION OF THE SEA LEVEL.** By R. S. Woodward. U. S. G. S., Bull. 48. 88 pages. 1888.
- THE DRUMLINS OF SOUTHEASTERN WISCONSIN.** By W. C. Alden. U. S. G. S., Bull. 273. 46 pages. I. 1905.
- SUBAERIAL DECAY OF ROCKS AND ORIGIN OF THE RED COLOR OF CERTAIN FORMATIONS.** By I. C. Russell. U. S. G. S., Bull. 52. 65 pages. I. 1889.

232 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- ORIGIN AND NATURE OF SOILS.** By N. S. Shaler. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 213-345. 1890-91. I.
- UNCONFORMITY AND DEPOSITS.** By Otto Ruhl. Min. & Sci. Press, vol. 96, p. 778. 3 columns. I.
- THE CAUSES OF CLIMATIC, GEOLOGICAL, AND GEOGRAPHICAL CHANGES UPON THE EARTH.** By J. M. Potter. T. A. I. M. E., vol. 3, p. 21. 35 pages.
- PLAN AND SCOPE OF THE PROPOSED INVESTIGATIONS OF STRUCTURAL MATERIALS UNDER THE AUSPICES OF THE UNITED STATES GEOLOGICAL SURVEY.** By J. A. Holmes and R. L. Humphrey. Soc. P. E. E., vol. 13, p. 304. 10 pages.
- THE VISCOSITY OF SOLIDS.** By C. Barus. U. S. G. S., Bull. 73. 139 pages. I. 1891.
- ON THE THERMO-ELECTRIC MEASUREMENT OF HIGH TEMPERATURES.** By C. Barus. U. S. G. S., Bull. 54. 313 pages. I. 1889.
- THE VOLUME THERMODYNAMICS OF LIQUIDS.** By C. Barus. U. S. G. S., Bull. 96. 100 pages. I. 1892.
- THE COMPRESSIBILITY OF LIQUIDS.** By C. Barus. U. S. G. S., Bull. 92. 96 pages. I. 1892.
- THE MECHANISM OF SOLID VISCOSITY.** By C. Barus. U. S. G. S., Bull. 94. 138 pages. 1892.
- HIGH TEMPERATURE WORK IN IGNEOUS FUSION AND EBULLITION, CHIEFLY IN RELATION TO PRESSURE.** By C. Barus. U. S. G. S., Bull. 103. 57 pages. I. 1893.
- METEOR CRATER.** By J. B. Hastings. Min. & Sci. Press, vol. 98, p. 523. 4½ columns. I.
- See also **DECOMPOSITION OF COAL.**
- See also **INDEXES, TEXTBOOKS, ETC.**
- Types of Veins and Examples**
- THE LAWS OF FISSURES.** By B. Stevens. T. A. I. M. E., vol. 40, p. 475. 17 pages. I.
- THE TRAP DIKES OF THE LAKE CHAMPLAIN REGION.** By J. F. Kemp and O. F. Marsten. U. S. G. S., Bull. 107. 62 pages. I. 1893.
- DIKES AND FISSURES AT PIOCHE, NEVADA.** E. & M. J., vol. 88, p. 546. 1½ columns.
- SILVER ISLET VEIN.** Min. & Sci. Press, vol. 98, p. 729. 1 column.
- LODES AND VEINS IN THE MANHATTAN DISTRICT, NEVADA.** E. & M. J., vol. 88, p. 82. 2 columns.
- LODES IN THE TERTIARY ERUPTIVES OF COLORADO.** By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 180. 4½ columns. I.
- VEINS AND VEIN MINING.** Min. Mag., vol. 10, p. 345. 18 pages. I.
- NOTES ON GRANITE VEINS IN CLAY, SLATES (ELVANS), MINERAL DEPOSITS, VEINS, LODS.** Min. Mag., vol. 10, p. 306. 6 pages. I.
- A FRAGMENTARY CONTRIBUTION TO THE VEIN GEOLOGY OF THE SOUTHERN STATES.** Min. Mag., vol. 10, p. 108. 5 pages. I.
- THE VEIN SYSTEM OF THE STANDARD MINE, BODIE, CALIFORNIA.** By R. G. Brown. T. A. I. M. E., vol. 38, p. 343. 15 pages. I.
- THE VEIN SYSTEM OF THE STANDARD MINE, BODIE, CALIFORNIA: Discussion of the paper of R. Gilman Brown.** Trans., vol. 38, p. 343. T. A. I. M. E., vol. 39, p. 795. 1½ pages.
- FISSURE-VEINS IN GRANITE, SCHISTS, ETC., MEXICAN SILVER MINES.** T. A. I. M. E., vol. 39, p. 361. 6½ pages.
- GOLD-SILVER VEINS OF OPHIR, CALIFORNIA.** By W. Lindgren. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 243-284. 1892-93. I.
- VEINS OF TANGIER, NOVA SCOTIA.** Min. & Sci. Press, vol. 95, p. 430. 4 columns. I.
- VEINS OF TREASURE MOUNTAIN, COLORADO.** Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.

- MINERAL-VEIN FORMATION AT BOULDER HOT SPRINGS, MONTANA.** By W. H. Weed. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 227-255. 1899-1900. I.
- GEOLOGY AND VEIN-PHENOMENA.** T. A. I. M. E., vol. 41, p. 613. 8 pages. D.
- ARTIFICIAL VEIN FORMATION.** By R. C. Canby. E. & M. J., vol. 85, p. 719. 2 columns.
- FEATURES OF A VEIN FORMATION IN NICARAGUA: Gold and Silver Veins.** By H. E. West. E. & M. J., vol. 87, p. 1130. 9½ columns. I.
- VEIN STRUCTURE IN THE MONUMENT MINE, IDAHO.** Min. & Sci. Press, vol. 98, p. 557. 3½ columns. I.
- VEIN STRUCTURE IN THE WONDER DISTRICT, NEVADA.** E. & M. J., vol. 87, p. 291. 3 columns.
- REMARKS ON THE CHANGES WHICH TAKE PLACE IN THE STRUCTURE AND COMPOSITION OF MINERAL VEINS NEAR THE SURFACE, WITH PARTICULAR REFERENCE TO THE EAST TENNESSEE COPPER MINES.** By J. D. Whitney. Min. Mag., vol. 5, p. 24. 4½ pages.
- Caverns and Natural Bridges**
- THE MAMMOTH CAVE OF KENTUCKY.** By J. H. Gardner. M. & M., vol. 31, p. 720. 6 columns. I.
- DEUTSCHMAN'S CAVE, NEAR GLACIER, BRITISH COLUMBIA, CANADA.** By W. S. Ayres. T. A. I. M. E., vol. 38, p. 857. 20½ pages. I.
- THE GROTTO OF ADELSBERG.** Min. Mag., vol. 9, p. 542. 6½ pages.
- Faults: Rules Regarding Them, Etc.**
- THE FAULT PROBLEM.** By T. C. Chamberlin. Min. & Sci. Press, vol. 96, p. 172. 1½ columns.
- FAULTS AS RECEPTACLES FOR MINERAL DEPOSITS.** T. A. I. M. E., vol. 4, p. 32. 2½ pages. I.
- RELATION OF FAULTS TO ORE DEPOSITS.** E. & M. J., vol. 86, p. 1159. 1½ columns.
- THE EXTRAORDINARY FAULTING AT THE BERLIN MINE, NEVADA.** By E. Daggett. T. A. I. M. E., vol. 38, p. 297. 16 pages. I.
- FAULTING IN THE BULLFROG DISTRICT, NEVADA.** By W. H. Emmons and G. H. Garrey. Min. & Sci. Press, vol. 100, p. 931, 5½ columns, I.; vol. 101, p. 46, 5½ columns, I.
- FAULT LODS IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** Min. & Sci. Press, vol. 101, p. 533. 1½ columns.
- FAULTING IN THE RED CLOUD MINE.** By H. W. Turner. Min. & Sci. Press, vol. 95, p. 747. 3½ columns. I.
- FAULTING AND VEIN-FORMATION IN THE ZACATECAS DISTRICT.** E. & M. J., vol. 87, p. 1227. 1 column. I.
- FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON.** By J. T. Pardee. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.
- Air-Blasts, Volcanoes and Earthquakes**
- EARTHQUAKE FORECASTS.** By G. K. Gilbert. Min. & Sci. Press, vol. 98, p. 168. 8 columns.
- EARTHQUAKES IN CALIFORNIA.** By J. E. Keeler. U. S. G. S., Bull. 68, 25 pages, 1890; Bull. 95, 31 pages, 1892; Bull. 112, 57 pages, 1893; Bull. 114, 23 pages, 1894; Bull. 129, 25 pages, 1895; Bull. 147, 23 pages, 1896; Bull. 155, 47 pages, 1898; Bull. 161, 31 pages, 1899.
- THE SAN FRANCISCO EARTHQUAKE AND FIRE OF APRIL 18, 1906, AND THEIR EFFECTS ON STRUCTURES AND STRUCTURAL MATERIALS.** By G. K. Gilbert and others. U. S. G. S., Bull. 324. 170 pages. I. 1907.
- RECENT EARTH MOVEMENT IN THE GREAT LAKES REGION.** By G. K. Gilbert. U. S. G. S., 18th Ann.

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- Rept., pt. 2, pp. 595-647. 1896-97. I.
- THE CHARLESTON EARTHQUAKE OF AUGUST 31, 1886. By C. E. Dutton. U. S. G. S., 9th Ann. Rept., pp. 203-528. 1887-88. I.
- THE JAMAICA EARTHQUAKE. Min. & Sci. Press, vol. 95, p. 690. $\frac{1}{2}$ column.
- EARTH MOVEMENTS AT BUTTE, MONTANA. By R. H. Chapman. Min. & Sci. Press, vol. 96, p. 493. $1\frac{1}{2}$ columns.
- THE EARTHQUAKE FIRE. By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 718. $13\frac{1}{2}$ columns. I.
- EXPLOSIVE ROCK. Min. & Sci. Press, vol. 96, p. 387. $\frac{1}{2}$ column.
- EARTHQUAKES AND THEIR RELATION TO MINE EXPLOSIONS. E. & M. J., vol. 87, p. 411. 9 columns.
- NOTES ON THE EFFECT OF EARTHQUAKES ON DEEP UNDERGROUND WATER CIRCULATION. By W. H. Yeandle. E. & M. J., vol. 88, p. 871. $1\frac{1}{2}$ columns.
- RECENT VOLCANIC ERUPTIONS IN BERING SEA. By A. S. Eakle. Min. & Sci. Press, vol. 96, p. 353. $1\frac{1}{2}$ columns. I.
- HAWAIIAN VOLCANOES. By C. E. Dutton. U. S. G. S., 4th Ann. Rept., pp. 75-219. 1882-83. I.
- Theory of Ore Deposits, Origin of Coal, Petroleum, Etc.**
- THEORY OF MINERAL VEINS. By J. Le Conte. Min. & Sci. Press, vol. 22, p. 23. 4 columns. I.
- THEORY OF ORE DEPOSITS. Min. & Sci. Press, vol. 20, p. 172. $1\frac{1}{2}$ columns.
- SOME INDICATIONS OF ORE DEPOSITS. By E. Lidgley. T. Au. I. M. E., vol. 4, p. 110. 10 pages.
- RECEPTACLES FOR VALUABLE MINERAL DEPOSITS. By F. D. Power. T. Au. I. M. E., vol. 4, p. 6. 28 pages. I.
- THE CLASSIFICATION OF VALUABLE MINERAL DEPOSITS. By F. D. Power. T. Au. I. M. E., vol. 1, p. 109. $20\frac{1}{2}$ pages.
- A STUDY OF SOME ORE DEPOSITS. By F. D. Johnson. T. Au. I. M. E., vol. 1, p. 28. 7 pages. I.
- GENERAL OBSERVATIONS ON THE FORMATIONS OF METALLIFEROUS VEINS. By B. Cotta. Min. Mag., vol. 3, p. 386, 5 pages; p. 465, 6 pages.
- MAGMATIC WATERS. By H. W. Hixon. J. C. M. I., vol. 10, p. 301. 20 pages.
- CRITERIA OF DOWNWARD SULPHIDE ENRICHMENT. By F. L. Ransome. J. C. M. I., vol. 13, p. 393. 14 pages.
- THE FORMATION AND ENRICHMENT OF ORE-BEARING VEINS. By G. J. Bancroft. T. A. I. M. E., vol. 38, p. 245. 24 pages.
- VOLCANIC WATERS. By J. B. Hastings. T. A. I. M. E., vol. 39, p. 129. 10 pages.
- THE FORMATION AND ENRICHMENT OF ORE-BEARING VEINS. By G. J. Bancroft. T. A. I. M. E., vol. 40, p. 809. 10 pages.
- METALLOGRAPHIC STUDY OF ORE DEPOSITS. P. C. M. & M. Soc. S. A., vol. 9, p. 279. 2 columns.
- CAUSES OF ORE-SHOOTS. Min. Mag., London, vol. 2, p. 459. 1 column.
- SEQUENCE OF ORE SHOOTS AND BONANZAS. By A. Aitken. M. & M., vol. 30, p. 274. 2 columns.
- THE DETECTION OF MINUTE TRACES OF GOLD IN COUNTRY ROCK. By A. R. Andrew. T. I. M. & M., vol. 19, p. 276. 22 pages.
- ON SECONDARY ENLARGEMENTS OF MINERAL FRAGMENTS IN CERTAIN ROCKS. By R. D. Irving and C. R. Van Hise. U. S. G. S., Bull. 8. 56 pages. I. 1884.
- POPULAR FALLACIES REGARDING PRECIOUS-METAL ORE DEPOSITS. By A. Williams, Jr. U. S. G. S., 4th Ann. Rept., pp. 253-271. 1882-83.

- ASSOCIATION OF MAGNETITE WITH SULPHIDES IN MINERAL DEPOSITS.** By J. B. Hastings. Min. & Sci. Press, vol. 97, p. 333, 4 columns; p. 358, 3½ columns.
- DIFFUSION AS A FACTOR IN ORE DEPOSITION.** By L. T. Wright. Min. & Sci. Press, vol. 96, p. 844. 4 columns. I.
- A THEORY OF ORE DEPOSITION.** By H. V. Winchell. Min. & Sci. Press, vol. 96, p. 385. 4 columns.
- TENDENCIES IN THE STUDY OF ORE DEPOSITS.** By W. Lindgren. Min. & Sci. Press, vol. 96, p. 567. 8½ columns.
- A THEORY OF ORE DEPOSITION.** By J. E. Spurr. Min. & Sci. Press, vol. 96, p. 261. 9½ columns.
- DIFFUSION AS A FACTOR IN ORE DEPOSITION.** By C. De Kalb. Min. & Sci. Press, vol. 96, p. 226. 2½ columns.
- METAL DISTRIBUTIONS IN THE VEINS OF SCANDINAVIA.** By H. Sjögren. Min. & Sci. Press, vol. 98, p. 159. 4 columns. D.
- DEVELOPMENT OF THE MODERN THEORIES OF ORE DEPOSITION.** By S. F. Emmons. Min. & Sci. Press, vol. 99, p. 400. 8 columns.
- ORES FORMED BY MAGMATIC SEGREGATION.** By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 451. 11½ columns.
- ECONOMICS OF SECONDARY ENRICHMENT.** By A. M. Finlayson. Min. & Sci. Press, vol. 101, p. 71, 8½ columns; p. 111, 6 columns.
- GENESIS OF ORE.** By J. Le Conte. Min. & Sci. Press, vol. 100, p. 833. 3½ columns.
- THEORIES OF ORE GENESIS OF FIFTY YEARS AGO.** By S. F. Emmons. Min. & Sci. Press, vol. 100, p. 739. 8 columns.
- THEORY OF ORE DEPOSITION.** Min. & Sci. Press, vol. 100, p. 424, 8 columns; p. 450, 5½ columns.
- MINERAL IN UNDERGROUND WATERS.** Min. & Sci. Press, vol. 95, p. 590. 1½ columns.
- ORE DEPOSITION.** By G. J. Bancroft. Min. & Sci. Press, vol. 95, p. 581. 2 columns.
- THE RELATION OF ORE DEPOSITION TO PHYSICAL CONDITIONS.** By W. Lindgren. Min. & Sci. Press, vol. 95, p. 207. 8 columns.
- THE GENESIS OF ORES.** By H. V. Winchell. Min. & Sci. Press, vol. 95, p. 55. 6½ columns.
- LOCUS OF VADOSE ORE DEPOSITION.** By C. R. Keyes. E. & M. J., vol. 87, p. 857. 3 columns.
- THE ULTIMATE SOURCE OF ORES.** By C. R. Keyes. T. A. I. M. E., vol. 41, p. 139. 24 pages.
- AN INSTANCE OF SECONDARY IMPOVERISHMENT.** By H. H. Knox. T. I. M. & M., vol. 18, p. 273. 18 pages. I.
- A THEORY OF VOLCANIC ACTION AND ORE DEPOSITS, THEIR NATURE AND CAUSE.** By H. W. Hixon. T. I. M. & M., vol. 18, p. 202, 18 pages, I.; p. 256, 16 pages.
- GOLD IN SEA WATER.** P. C. M. & M. Soc. S. A., vol. 6, p. 93. ½ column.
- GOLD AND SILVER IN THERMAL SPRINGS.** Min. & Sci. Press, vol. 96, p. 562. ½ column.
- THE PRESENCE OF GOLD AND SILVER IN DEEP-SEA DREDGINGS.** By L. Wagoner. T. A. I. M. E., vol. 38, p. 704. 1 page.
- CLASSIFICATION OF MEXICAN ORE DEPOSITS.** E. & M. J., vol. 88, p. 692. 1½ columns.
- "SOME NOTES ON THE ORIGIN OF ASBESTOS."** By A. E. Bartow. J. C. M. I., vol. 13, p. 438. 5½ pages.
- See also OCCURRENCE OF ASBESTOS.
- GENESIS OF THE VIRGINIA BARITE DEPOSITS.** By T. L. Watson. T. A. I. M. E., vol. 38, p. 731. 1 page.
- ORIGIN OF THE MISSOURI BARITE.** By A. A. Steel. T. A. I. M. E., vol. 40, p. 721. 6 pages. I.

See also OCCURRENCE OF BARITE.

BORAX DEPOSITS OF THE UNITED STATES. By C. R. Keyes. T. A. I. M. E., vol. 40, p. 674. 36½ pages. I.

See also OCCURRENCE OF BORAX.

THE ALTERATION OF VEGETABLE MATTER INTO COAL. By D. B. Dowling. J. C. M. I., vol. 13, p. 180. 9½ pages.

THE ORIGIN OF COAL. E. & M. J., vol. 86, p. 238. 1½ columns.

THE ORIGIN OF COAL. By H. M. Chance. E. & M. J., vol. 86, p. 27. 5 columns.

METAMORPHISM OF COAL: Formation of Anthracite and Natural Coke. Min. & Sci. Press, vol. 95, p. 59. ¼ column.

REMARKS ON THE ORIGIN OF COAL FIELDS, AND THE TIME REQUIRED FOR THEIR FORMATION. By C. Lyell. Min. Mag., vol. 1, p. 121. 5 pages.

ON THE MODE OF FORMATION OF CANNEL COAL. By J. S. Newberry. Min. Mag., vol. 9, p. 352. 3 pages.

FOSSIL TREE IN THE ARLEY MINE AT CHEQUERBENT COLLIERY. T. I. M. E., vol. 37, p. 174. 2 pages.

See also OCCURRENCE OF COAL.

CHINA CLAY: Its Nature and Origin. By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.

See also OCCURRENCE OF WORKABLE CLAYS.

SCIENTIFIC STUDY OF COPPER DEPOSITS. By A. J. Sale. M. & M., vol. 31, p. 684. 4½ columns. I.

SOME NEW POINTS IN THE GEOLOGY OF COPPER ORES. By J. F. Kemp. J. C. M. I., vol. 10, p. 251. 5 pages.

GENESIS OF THE KENNICOTT COPPER MINE, ALASKA. E. & M. J., vol. 89, p. 1226. 1 column.

THE MIAMI-INSPIRATION ORE-ZONE. By C. F. Tolman, Jr. Min. & Sci. Press, vol. 99, p. 646. 9½ columns. I.

THE GENESIS OF THE MOUNT LYELL ORES. By J. W. Gregory. T. A. I. M. E., vol. 10, p. 145. 12 pages. I.

GENESIS OF COPPER ORES OF SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 396. ½ column.

GENESIS OF THE EVERGREEN COPPER DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 757. 9 pages. I.

THEORY OF DEPOSITION OF THE WHITE KNOB COPPER DEPOSITS, MACKAY, IDAHO. T. A. I. M. E., vol. 38, p. 293. 3 pages.

ORE-SHOOTS AT BUTTE, MONTANA. By R. H. Sales. Min. & Sci. Press, vol. 97, p. 190. 3 columns.

THE GENESIS OF THE COPPER DEPOSITS OF YERINGTON, NEVADA. By E. P. Jennings. J. C. M. I., vol. 10, p. 257. 3½ pages.

GENESIS OF THE ORE DEPOSITS OF THE FORTUNA MINE, BINGHAM, UTAH. E. & M. J., vol. 86, p. 1195. ¼ column.

ORIGIN OF THE MARBLE BAY COPPER DEPOSIT. J. C. M. I., vol. 10, p. 248. ½ page.

See also OCCURRENCE OF COPPER AND COPPER ORES.

THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHO DISTRICT, SOUTH AFRICA. By J. P. Johnson. T. I. M. & M., vol. 17, p. 277. 8 pages.

GENESIS OF THE ARKANSAS DIAMONDS. E. & M. J., vol. 87, p. 154. ¼ column.

KIMBERLITE ROCK AND THE ORIGIN OF THE DIAMONDS. By F. W. Voit. E. & M. J., vol. 87, p. 789. 6½ columns.

ORIGIN OF DIAMONDS IN GERMAN SOUTH WEST AFRICA. By R. G. Pearson. E. & M. J., vol. 89, p. 1282. 1 column.

GENESIS OF AMATRICE: The New Gem Stone of Utah. E. & M. J., vol. 87, p. 1039. ¼ column.

AN ATTEMPT TO GROW A DIAMOND. P. C. M. & M. Soc. S. A., vol. 7, p. 123. Note.

- See also OCCURRENCE OF DIAMONDS. GENESIS OF THE GOLDFIELD ORES. M. & M., vol. 30, p. 511. 4 columns. I.
- GOLDFIELD ORE DEPOSITS. By F. L. Ransome. M. & M., vol. 30, p. 396, 6 columns, I.; p. 510, 6 columns, I.
- THE DEPOSITION OF GOLD: Ore Deposits. By J. C. F. Johnson. T. A. I. M. E., vol. 1, p. 142. 2 pages.
- CONCENTRATION OF SOLUBLE GOLD IN A DUMP. By G. B. Butterworth. Min. Mag., London, vol. 2, p. 458. 2 columns.
- DEPTH TO WHICH SECONDARY ENRICHMENT MAY EXTEND IN THE WESTERN AUSTRALIAN ORE DEPOSITS. T. A. I. M. E., vol. 13, p. 179. 3 pages.
- BROKEN HILL VUGHS: Occurrence and Some Probable Causes. By H. G. Baye. T. A. I. M. E., vol. 3, p. 192. 5½ pages.
- INDICATORS AND QUARTZ REEFS IN VICTORIAN MINES. By J. T. Procter. T. A. I. M. E., vol. 3, p. 198. 4 pages. I.
- THE "INDICATOR" FEATURE IN SOME GOLD OCCURRENCES, AUSTRALIA. By W. Bradford. T. A. I. M. E., vol. 3, p. 231. 6 pages. I.
- ORIGIN OF THE REEFS IN THE WAIHI GOLDFIELD, NEW SOUTH WALES. T. A. I. M. E., vol. 8, pt. 2, p. 170. 2 pages. I.
- THE GENESIS OF BENDIGO AND CARTRICK LODES, OTAGO, NEW ZEALAND. By J. Park. Min. & Sci. Press, vol. 97, p. 121. 3½ columns. I.
- THE ORIGIN OF THE GOLD IN THE RAND BANKET. By J. W. Gregory. T. I. M. & M., vol. 17, p. 2. 83½ pages. I.
- THEORIES OF THE GENESIS OF THE RAND GOLD. T. I. M. & M., vol. 17, p. 3. 4 pages.
- ORIGIN OF THE GOLD OF THE RAND. By J. W. Gregory. Min. & Sci. Press, vol. 98, p. 662. 6½ columns.
- THE ORIGIN OF THE GOLD IN BANKET. By J. S. Curtis. P. C. M. & M. Soc. S. A., vol. 8, p. 198, 9 columns; p. 242, ½ column; p. 302, 4 columns; p. 342, 1 column.
- ORIGIN OF GOLD IN THE RANDSBURG QUADRANGLE, CALIFORNIA. Min. & Sci. Press, vol. 101, p. 536. ½ column.
- ORIGIN OF GOLD "POCKETS" IN NORTHERN CALIFORNIA. By O. H. Hershey. Min. & Sci. Press, vol. 101, p. 741. 3½ columns.
- THEORY OF THE EXPOSED TREASURE LODE DEPOSIT, MOJAVE, CALIFORNIA. By C. De Kalb. T. A. I. M. E., vol. 38, p. 319. ½ page.
- DERIVATION OF ORES OF THE GEORGETOWN DISTRICT, COLORADO. M. & M., vol. 30, p. 208. 2 columns.
- ORE DEPOSITS OF THE EASTERN GOLDBELT OF NORTH CAROLINA. By W. O. Crosby. T. A. I. M. E., vol. 38, p. 849. 9 pages.
- ORIGIN OF ORE IN THE COAHUILA DISTRICT, MEXICO. E. & M. J., vol. 89, p. 1072. 1½ columns.
- MODE OF ORE GENESIS: Gold and Silver in Nicaragua. E. & M. J., vol. 87, p. 1131. 1½ columns. I.
- ORIGIN OF THE PLACER GOLD OF GUIANA. By L. Fraser. Min. & Sci. Press, vol. 101, p. 703. 4 columns.
- DEEP LEADS OF VICTORIA: Theory of Their Origin. T. I. M. & M., vol. 17, p. 214. 10 pages. I.
- DEPOSITION OF ORE IN THE MANHATTAN DISTRICT, NEVADA. E. & M. J., vol. 88, p. 83. 2 columns.
- THE TREADWELL ORE DEPOSITS, DOUGLAS ISLAND, ALASKA. By A. C. Spencer. U. S. G. S., Bull. 259, p. 69. 19 pages. I.
- FLOOD-GOLD. E. & M. J., vol. 86, p. 558. ½ column.
- See also OCCURRENCE OF GOLD.
- ORIGIN OF CUBAN IRON ORES. M. & M., vol. 31, p. 246. ½ column.
- THE RESIDUAL BROWN IRON ORES OF CUBA. By C. M. Weld. T. A. I. M. E., vol. 40, p. 299. 13½ pages. I.

- PYRITIC ORIGIN OF IRON ORE DEPOSITS.** E. & M. J., vol. 86, p. 630. 3 columns.
- THE PYRITIC ORIGIN OF IRON ORE DEPOSITS.** By H. M. Chance. E. & M. J., vol. 86, p. 408. 8 columns.
- GENESIS OF BROWN HEMATITE ORES AND A NEW SOURCE OF SULPHUR SUPPLY.** By H. M. Chance. T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- A NEW THEORY OF THE GENESIS OF BROWN HEMATITE ORES AND A NEW SOURCE OF SULPHUR SUPPLY:** Discussion of the paper of H. M. Chance, p. 522. T. A. I. M. E., vol. 39, p. 916. 4½ pages.
- THE ORIGIN OF DEPOSITS OF PYRITES.** By A. B. Willmott. J. C. M. I., vol. 10, p. 118. 11 pages.
- GENESIS OF THE ONTARIO IRON ORES.** J. C. M. I., vol. 11, p. 115. 1 page.
- ORIGIN OF PROTO-CARBONATE OF IRON IN COAL MEASURES.** Min. Mag., vol. 6, p. 201. 5 pages.
- POSSIBLE ORIGIN OF THE CLINTON IRON ORE OF ALABAMA.** T. A. I. M. E., vol. 40, p. 119. 8 pages.
- THE ORIGIN OF THE CLINTON IRON ORE, HUNTINGDON COUNTY, PENNSYLVANIA.** T. A. I. M. E., vol. 40, p. 147. 18½ pages. I.
- ORIGIN OF THE CLINTON OÖLITIC IRON ORES OF NEW YORK STATE.** T. A. I. M. E., vol. 40, p. 176. 3 pages.
- THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON ORES.** By H. Sjögren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- See also OCCURRENCE OF IRON ORES.
- THE ORIGIN OF LATERITE.** By J. M. Campbell. T. I. M. & M., vol. 19, p. 432. 26 pages. I.
- THE GENESIS OF THE LEADVILLE ORE DEPOSITS.** By M. Bohmer. T. A. I. M. E., vol. 41, p. 162. 4½ pages. I.
- GENESIS OF THE ORES OF LEADVILLE.** By S. F. Emmons. Min. & Sci. Press, vol. 95, p. 401. 9 columns.
- GENESIS OF THE LEADVILLE ORES.** E. & M. J., vol. 89, p. 265. 2 columns. I.
- THEORY OF ORE DEPOSITION IN SOUTHWESTERN MISSOURI.** Min. & Sci. Press, vol. 96, p. 291, 7 columns; p. 325, 7½ columns.
- A REPLACEMENT OF RHYOLITE PORPHYRY BY STEPHANITE AND CHALCOPYRITE AT LEADVILLE.** By C. W. Fenner. Sch. Mines Quart., vol. 31, p. 235. 6 pages. I.
- PRESENT VIEWS OF GENESIS OF LEADVILLE LIMESTONE ORES.** By S. F. Emmons. E. & M. J., vol. 85, p. 104. 5 columns.
- OZARK LEAD AND ZINC-DEPOSITS:** Their Genesis, Localization, and Migration. By C. R. Keyes. T. A. I. M. E., vol. 40, p. 184. 47½ pages. I.
- See also OCCURRENCE OF LEAD.
- ORIGIN OF A MANGANESE DEPOSIT IN SOUTHERN INDIA.** T. I. M. & M., vol. 18, p. 140. 3 pages. I.
- See also OCCURRENCE OF MANGANESE.
- ORIGIN OF THE MONAZITE DEPOSITS OF THE CAROLINAS.** T. A. I. M. E., vol. 40, p. 325. 1 page.
- See also OCCURRENCE OF MONAZITE.
- GENESIS OF THE VIRGINIA NICKEL ORES.** T. A. I. M. E., vol. 38, p. 697. ½ page.
- See also OCCURRENCE OF NICKEL.
- GENESIS OF PETROLEUM.** M. & M., vol. 30, p. 222. 1½ columns.
- RELATIONS BETWEEN LOCAL MAGNETIC DISTURBANCES AND THE GENESIS OF PETROLEUM.** By G. F. Becker. U. S. G. S., Bull. 401. 24 pages. 1909.
- THE CONDITIONS OF ACCUMULATION OF PETROLEUM IN THE EARTH.** By D. T. Day. T. A. I. M. E., vol. 41, p. 219. 5 pages.
- See also OCCURRENCE OF PETROLEUM.
- ORIGIN OF THE ROCK PHOSPHATE OF THE CLARENDON DEPOSIT, NEW ZEALAND.** T. A. I. M. E., vol. 11, p. 190. 6 pages. I.

NATURE AND ORIGIN OF DEPOSITS OF PHOSPHATE OF LIME. By R. A. F. Penrose, Jr. U. S. G. S., Bull. 46. 143 pages. I. 1888.

See also OCCURRENCE OF PHOSPHATES.

ORIGIN AND FORMATION OF PLATINUM DEPOSITS IN BRITISH COLUMBIA. J. C. M. I., vol. 13, p. 317. 2½ pages.

See also OCCURRENCE OF PLATINUM.

THEORY OF THE QUICKSILVER DEPOSITS OF MEXICO, DULCES NOMBRES. E. & M. J., vol. 88, p. 685. 1½ columns.

See also OCCURRENCE OF QUICKSILVER.

ORIGIN OF COBALT-SILVER ORES OF ONTARIO. By O. E. Hore. Min. & Sci. Press, vol. 97, p. 874. 5½ columns. I.

THE ORIGIN OF THE SILVER OF JAMES TOWNSHIP, MONTREAL RIVER MINING DISTRICT. By A. E. Barlow. J. C. M. I., vol. 11, p. 256. 18 pages. I.

ORIGIN OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO. By R. E. Hore. J. C. M. I., vol. 11, p. 275. 12 pages.

ORIGIN OF THE PEAKS SILVER FIELD ORES, NEW SOUTH WALES. T. Au. I. M. E., vol. 11, p. 137. 12 pages. I.

GENESIS OF THE GUANAJUATO ORE DEPOSITS. E. & M. J., vol. 87, p. 693. 1 column.

ORIGIN OF THE ORES OF THE NACOA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 659. 1 column.

THE ORE DEPOSITS OF MAGDALENA, NEW MEXICO. By P. Argall. E. & M. J., vol. 86, p. 366. 15 columns. I.

GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER-DEPOSITS: Discussion of Paper of C. R. Keyes, vol. 39, pp. 139, 850. T. A. I. M. E., vol. 40, p. 831. 4 pages.

THE SILVER-LEAD ORE ZONES OF THE UMBERBERKA LODGE. By N. Dudley. T. Au. I. M. E., vol. 1, p. 135. 4½ pages.

See also OCCURRENCE OF SILVER.

THEORY OF THE PROMONTORIO ORE DEPOSIT. T. A. I. M. E., vol. 38, p. 741. 5½ pages. I.

ORIGIN OF THE TIN DEPOSITS IN SOUTH AFRICA. E. & M. J., vol. 89, p. 573. 5 columns. I.

GEOLOGY AND MINING OF THE TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. T. A. I. M. E., vol. 38, p. 664. 18 pages. I.

ORIGIN OF TIN DEPOSITS OF CAPE COLONY. P. C. M. & M. Soc. S. A., vol. 8, p. 170. 2½ columns.

See also OCCURRENCE OF TIN.

THEORY OF THE FORMATION OF THE JOPLIN REGION ORE DEPOSITS. T. A. I. M. E., vol. 38, p. 320. 23 pages.

PROBABLE RELATION BETWEEN "THE ZINCIFEROUS SULPHIDE ORES AND THE OXIDIZED ORES OF THE BROKEN-HILL LODGE." By C. W. Marsh. T. Au. I. M. E., vol. 1, p. 56. 9½ pages. I.

THE ORE DEPOSITS OF MAGDALENA, NEW MEXICO. By P. Argall. E. & M. J., vol. 86, p. 366. 15 columns. I.

See also OCCURRENCE OF ZINC.

ORIGIN OF PEGMATITE. By J. B. Hastings. T. A. I. M. E., vol. 39, p. 104. 24½ pages.

METALLIC SULPHIDES IN THE TUFFS OF SANTO DOMINGO. By F. L. Garrison. Min. & Sci. Press, vol. 95, p. 305. 10½ columns. I.

LODES IN THE TERTIARY ERUPTIVES OF COLORADO. By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 180. 4½ columns. I.

ORIGIN OF THE PEGMATITE DEPOSITS OF WESTERN MAINE. E. & M. J., vol. 87, p. 1127. ½ column.

See also SOURCE AND SUPPLY OF WATER.

Occurrence of Alum and Nitrates

THE GILA RIVER ALUM DEPOSITS. By C. W. Hays. U. S. G. S., Bull. 315, p. 215. 10 pages. I. 1906.

NITRATE DEPOSITS OF SOUTHERN CALIFORNIA. By F. W. Graeff. E. & M. J., vol. 90, p. 173. 2½ columns.

NITRATE OF SODA INDUSTRY OF CHILE. By S. H. Loram. Min. & Sci. Press, vol. 100, p. 125, 8 columns, I.; p. 180, 10 columns, I.

THE NITER INDUSTRY OF CHILE. E. & M. J., vol. 90, p. 19. 14½ columns. I.

NOTES ON THE ALUMINUM INDUSTRY IN FRANCE. By T. Callot. E. & M. J., vol. 89, p. 1229. 3 columns. I.

NITRATE OF SODA: Its Abundance in South Peru. Min. Mag., vol. 3, p. 499. 7 pages.

Occurrence of Antimony

THE WHEATON RIVER ANTIMONY DEPOSITS, YUKON TERRITORY. By D. D. Cairnes. J. C. M. I., vol. 13, p. 297. 11½ pages. I.

THE ARKANSAS ANTIMONY DEPOSITS. By F. L. Hess. U. S. G. S., Bull. 340, p. 241. 12 pages. I. 1907.

THE AURIFEROUS ANTIMONY ORE OF WEST GORE, NOVA SCOTIA. By D. F. Haley. E. & M. J., vol. 88, p. 723. 5½ columns.

ANTIMONY IN SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 340, p. 253. 4 pages. 1907.

Occurrence of Arsenic

AN ARSENIC MINE IN PUTNAM COUNTY, NEW YORK. By E. K. Judd. E. & M. J., vol. 85, p. 306. 1 column.

ARSENIC MANUFACTURE AT MIDVALE, UTAH. By L. A. Palmer. M. & M., vol. 30, p. 641. 7 columns. I.

Occurrence of Asbestos

ASBESTOS: Occurrence and Uses. By H. R. Edgecomb. M. & M., vol. 31, p. 469. 6½ columns. I.

NOTES ON THE RECENT DEVELOPMENTS IN ASBESTOS MINING IN

QUEBEC. By W. J. Woolsey. J. C. M. I., vol. 13, p. 408. 6 pages. I.

ON THE DISTRIBUTION OF ASBESTOS DEPOSITS IN THE EASTERN TOWNSHIPS OF QUEBEC. By J. A. Dresser. J. C. M. I., vol. 13, p. 414. 26 pages. I.

ASBESTOS IN QUEBEC. By F. Cirkel. E. & M. J., vol. 86, p. 461. 1 column.

THE QUARRIES OF THE CANADIAN ASBESTOS DISTRICT. By F. Cirkel. E. & M. J., vol. 89, p. 918. 6½ columns. I.

THE ASBESTOS INDUSTRY IN CENTRAL WYOMING. By F. H. Barrow. E. & M. J., vol. 90, p. 559. 3 columns. I.

ASBESTOS IN WYOMING. By H. C. Beeler. E. & M. J., vol. 90, p. 955. 2½ columns. I.

See also **THEORY OF ORE DEPOSITS.**

Occurrence of Asphalts

BITUMEN AND OILS IN WEST AFRICA. By T. H. Boorman. E. & M. J., vol. 87, p. 1037. 3 columns.

THE TAR-SANDS OF THE ATHABASCA RIVER, CANADA. By Robt. Bell. T. A. I. M. E., vol. 38, p. 836. 12 pages. I.

AN OCCURRENCE OF ASPHALTITE IN NORTHEASTERN NEVADA. By R. Anderson. U. S. G. S., Bull. 380, p. 283. 2½ pages. 1908.

THE CARBONACEOUS AND BITUMINOUS MINERALS OF NEW BRUNSWICK. By R. W. Ellis. J. C. M. I., vol. 11, p. 204. 15 pages.

GRAHAMITE DEPOSITS OF SOUTHEASTERN OKLAHOMA. By J. A. Taff. U. S. G. S., Bull. 380, p. 286. 12 pages. I. 1908.

OZOKERITE IN UTAH. By H. W. MacFadden. Min. & Sci. Press, vol. 99, p. 789. 2½ columns. I.

OZOKERITE DEPOSITS IN UTAH. By J. A. Taff and C. D. Smith. U. S. G. S., Bull. 285, p. 369. 4 pages. 1905.

MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD. By J. C. T. Raspass. T. I. M. E., vol. 36, p. 119. 5 pages.

Occurrence of Barite

A COMMERCIAL OCCURRENCE OF BARITE NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Phalen. U. S. G. S., Bull. 340, p. 458. 4½ pages. I. 1907.

THE GEOLOGY, MINING, AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol. 40, p. 711, 32½ pages. I.

THE VIRGINIA BARITE DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

BARITE ASSOCIATED WITH IRON-ORE IN PINAR DEL RIO PROVINCE, CUBA. By C. Catlett. T. A. I. M. E., vol. 38, p. 358. 1½ pages.

See also THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.

The Occurrence of Bismuth

BISMUTH: Its Occurrence and Use. By E. B. Wilson. M. & M., vol. 30, p. 105. 5½ columns.

Occurrence of Borax

AMERICAN BORAX DEPOSITS. By C. R. Keys. E. & M. J., vol. 88, p. 826. 5 columns. I.

See also UNITED STATES.

BORAX IN CALIFORNIA. Min. and Sci. Press, vol. 101, p. 400. 1½ columns.

BORATE DEPOSITS OF CALIFORNIA. By A. B. Wainewright. T. I. M. E., vol. 37, p. 156. 6 pages.

Distribution of Building Stone

GEOLOGY OF ROAD-BUILDING STONES OF MASSACHUSETTS, WITH SOME CONSIDERATION OF SIMILAR MATERIALS FROM OTHER PARTS OF THE UNITED STATES. By N. S. Shaler.

U. S. G. S., 16th Ann. Rept., pt. 2, pp. 277-341. 1894-95. I.

THE BUILDING STONES AND MATERIALS OF SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 345, p. 116. 10 pages. 1907.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF MINNEAPOLIS, MINNESOTA. By E. F. Burchard. U. S. G. S., Bull. 430, p. 280. 12 pages. 1909.

STRUCTURAL MATERIALS IN PARTS OF OREGON AND WASHINGTON. By N. H. Darton. U. S. G. S., Bull. 387, 36 pages. I. 1909.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF AUSTIN, TEXAS. By E. F. Burchard. U. S. G. S., Bull. 430, p. 292. 24 pages. 1909.

FIELD INVESTIGATIONS OF STRUCTURAL MATERIALS BY THE U. S. GEOLOGICAL SURVEY. By E. F. Burchard. T. A. I. M. E., vol. 41, p. 490. 4½ pages.

GRANITES. By G. Suit. Min. & Sci. Press, vol. 99, p. 712. 5 columns. I.

CHIEF COMMERCIAL GRANITES OF MASSACHUSETTS, NEW HAMPSHIRE AND RHODE ISLAND. By T. N. Dale. U. S. G. S., Bull. 354. 228 pages. I. 1908.

GRANITES OF THE SOUTHEASTERN ATLANTIC STATES. By T. L. Watson. U. S. G. S., Bull. 426. 282 pages. I.

THE GRANITES OF VERMONT. By T. N. Dale. U. S. G. S., Bull. 404. 138 pages. I. 1909.

THE OÖLITIC LIMESTONE INDUSTRY AT BEDFORD AND BLOOMINGTON, ILLINOIS. By J. A. Udden. U. S. G. S., Bull. 430, p. 335. 12 pages. 1909.

OÖLITIC LIMESTONE AT BOWLING GREEN AND OTHER PLACES IN KENTUCKY. By J. H. Gardner. U. S. G. S., Bull. 430, p. 373. 7 pages. 1909.

THE WHITE LIMESTONE AREA OF FRANKLIN, SUSSEX COUNTY, NEW JERSEY. By J. E. Wolff and A. H.

242 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- Brooks. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 425-458. 1896-97. I.
- LIMESTONES OF SOUTHWESTERN PENNSYLVANIA. By F. G. Clapp. U. S. G. S., Bull. 249. 52 pages. I. 1905.
- MARBLE PROSPECTS IN THE CHIRICAHUA MOUNTAINS, ARIZONA. By S. Paige. U. S. G. S., Bull. 380, p. 299. 13 pages. I. 1908.
- MARBLE OF WHITE PINE COUNTY, NEVADA, NEAR GANDY, UTAH. By N. H. Darton. U. S. G. S., Bull. 340, p. 377. 3 pages. 907.
- THE SLATES OF ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 430, p. 317. 18 pages. I. 1909.
- SLATE MINING IN WALES AND CAUSE OF ITS DECLINE. E. & M. J., vol. 85, p. 145. 7½ columns. I.
- NOTE ON A VARIETY OF MAINE SLATE. By T. N. Dale. U. S. G. S., Bull. 285, p. 449. 1½ pages. 1905.
- SUPPLEMENTARY NOTES ON THE GRANITES OF NEW HAMPSHIRE. By T. N. Dale. U. S. G. S., Bull. 430, p. 346. 26 pages. 1909.
- THE SLATE BELT OF EASTERN NEW YORK AND WESTERN VERMONT. By T. N. Dale. U. S. G. S., 19th Ann. Rept., pt. 3, pp. 153-307. 1897-98. I.
- THE PRODUCTION OF SLATE IN THE UNITED STATES. Min. & Sci. Press, vol. 95, p. 467. ½ column.
- THE SLATE QUARRIES OF VERMONT. By C. S. Richardson. Min. Mag., vol. 2, p. 271. 12 pages.
- Occurrence of Cement Rock**
- PORTLAND CEMENT MATERIALS NEAR DUBUQUE, IOWA. By E. F. Burchard. U. S. G. S., Bull. 315, p. 225. 7½ pages. 1906.
- PORTLAND CEMENT IN MICHIGAN. By L. L. Kimball. U. S. G. S., Mineral Resources, 1903.
- CEMENT MATERIAL NEAR HAYRE, MONTANA. By L. J. Pepperberg. U. S. G. S., Bull. 380, p. 327. 10 pages. 1908.
- CEMENT MATERIALS IN REPUBLICAN VALLEY, NEBRASKA. By N. H. Darton. U. S. G. S., Bull. 430, p. 381. 8 pages. I. 1909.
- CEMENT RESOURCES OF THE CUMBERLAND GAP DISTRICT, TENNESSEE-VIRGINIA. By E. C. Eckel. U. S. G. S., Bull. 285, p. 374. 2½ pages. 1905.
- PORTLAND CEMENT MATERIALS NEAR EL PASO, TEXAS. By G. B. Richardson. U. S. G. S., Bull. 340, p. 411. 4 pages. 1907.
- CEMENT RESOURCES OF WASHINGTON. By H. Landes. U. S. G. S., Bull. 285, p. 377. 8 pages. 1905.
- PORTLAND CEMENT MATERIALS IN EASTERN WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 232. 12 pages. I. 1906.
- Occurrence of Workable Clays**
- KAOLINS AND FIRE CLAYS OF EUROPE. By H. Ries. U. S. G. S., 19th Ann. Rept., pt. 6. 91 pages. 1897-98.
- THE CLAYS AND OCHERS OF ALABAMA. By E. A. Smith. E. & M. J., vol. 85. p. 1088. ½ column.
- See also OCCURRENCE OF IRON ORES.
- CLAYS OF THE BIRMINGHAM DISTRICT, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 291. 4 pages. 1906.
- THE CLAYS OF ARKANSAS. By J. C. Branner. U. S. G. S., Bull. 351. 247 pages. I. 1908.
- CLAYS OF GARLAND COUNTY, ARKANSAS. By E. C. Eckel. U. S. G. S., Bull. 285, p. 407. 3½ pages. 1905.
- CLAY DEPOSITS OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler and J. H. Gardner. U. S. G. S., Bull. 315, p. 296. 6½ pages. 1906.

- CHINA-CLAY MINING IN CORNWALL. Min. Mag., vol. 4, p. 450. 3 columns. I.
- NOTES ON THE CLAYS OF FLORIDA. By G. C. Watson. U. S. G. S., Bull. 380, p. 346. 10 pages. 1908.
- KAOLINS AND FIRE CLAYS OF CENTRAL GEORGIA. By O. Veatch. U. S. G. S., Bull. 315, p. 303. 12 pages. I. 1906.
- CLAY RESOURCES OF NORTHEASTERN KENTUCKY. By W. C. Phalen. U. S. G. S., Bull. 285, p. 411. 6 pages. 1905.
- CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.
- CLAYS OF THE PENOBSCOT BAY REGION, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 428. 4 pages. 1905.
- CLAYS OF CAPE COD, MASSACHUSETTS. By M. L. Fuller. U. S. G. S., Bull. 285, p. 432. 9½ pages. 1905.
- BRICK CLAYS NEAR CLINTON, MASSACHUSETTS. By W. C. Alden. U. S. G. S., Bull. 430, p. 402. 3 pages. 1909.
- CLAY RESOURCES OF THE ST. LOUIS DISTRICT, MISSOURI. By N. M. Fenneman. U. S. G. S., Bull. 315, p. 315. 6½ pages. I. 1906.
- CLAYS IN THE KOOTINAI FORMATION NEAR BELT, MONTANA. By C. A. Fisher. U. S. G. S., Bull. 340, p. 417. 7 pages. 1907.
- THE SHALE AND CLAY DEPOSITS OF NOVA SCOTIA AND PORTIONS OF NEW BRUNSWICK. By H. Ries. J. C. M. I., vol. 13, p. 336. 20½ pages. I.
- THE CLAY AND SHALE DEPOSITS OF NOVA SCOTIA. By H. Ries. J. M. Soc. N. S., vol. 15, p. 9. 18½ pages.
- NOTES ON CLAYS AND SHALES IN CENTRAL PENNSYLVANIA. By G. H. Ashley. U. S. G. S., Bull. 285, p. 442. 2 pages. 1905.
- WHITE CLAYS OF SOUTH MOUNTAIN, PENNSYLVANIA. By G. W. Stose. U. S. G. S., Bull. 315, p. 322. 12½ pages. I. 1906.
- CLAYS AND SHALES OF SOUTHWESTERN CAMBRIA COUNTY, PENNSYLVANIA. By W. C. Phalen and L. Martin. U. S. G. S., Bull. 315, p. 344. 10 pages. 1906.
- CLAYS AND SHALES OF CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA. By E. F. Lines. U. S. G. S., Bull. 315, p. 335. 8 pages. 1906.
- CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.
- BENTONITE OF THE LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 445. 4 pages. 1905.
- THE CLAYS OF TENNESSEE. By G. H. Ashley. Min. & Sci. Press, vol. 101, p. 712. 1½ columns.
- See also THEORY OF ORE DEPOSITS.

Occurrence of Coal and Lignite

- OUR STEAM-COAL AND ITS USES. By L. Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.
- CUMBERLAND COAL. Min. Mag., vol. 1, p. 35. 9 pages.
- SEMI-BITUMINOUS COAL-FIELDS OF GREAT BRITAIN AND AMERICA COMPARED. By Prof. Whitaker. Min. Mag., vol. 10, p. 189. 2 pages.
- AMERICAN VS. EUROPEAN COAL MINES. By H. M. Payne. M. & M., vol. 31, p. 195. 2½ columns.
- BRIEF NOTES ON EUROPEAN COAL MINES. By F. W. Parsons. E. & M. J., vol. 88, p. 497, 7½ columns, I.; p. 589, 12 columns, I.; p. 809, 11 columns, I.
- SOUTH AFRICAN COALS AND THEIR ECONOMICS. By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 9, p. 330, 9½ columns; p. 391, 6 columns, D.

244 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- SOUTH AFRICAN COALS AND THEIR ECONOMICS.** By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 10, p. 92. 5 columns.
- FUELS OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.
- THE WARRIOR COAL BASIN IN THE BIRMINGHAM QUADRANGLE, ALABAMA.** By C. Butts. U. S. G. S., Bull. 285, p. 211. 12 pages. I. 1905.
- LAHAUSAGE MINE, ALABAMA.** By A. W. Evans. M. & M., vol. 30, p. 77. 4½ columns. I.
- THE COOSA COALFIELD OF ALABAMA.** By W. F. Prouty. E. & M. J., vol. 88, p. 921. 4 columns. I. Sections and Maps.
- THE NORTHERN PART OF THE COHABA COAL FIELD, ALABAMA.** By C. Butts. U. S. G. S., Bull. 316, p. 76. 40 pages. I. 1906.
- THE ALASKA COAL FIELDS.** By G. C. Martin. U. S. G. S., Bull. 314, p. 40. 7 pages. I. 1906.
- ALASKA COAL AND ITS UTILIZATION.** By A. H. Brooks. U. S. G. S., Bull. 442, p. 47. 54 pages. I. 1909
- COAL RESOURCES OF SOUTHWESTERN ALASKA.** By R. W. Stone. U. S. G. S., Bull. 259, p. 151. 21 pages. I.
- BERING RIVER COAL FIELD.** By G. C. Martin. U. S. G. S., Bull. 259, p. 140. 10½ pages. I.
- THE BERING RIVER COALFIELD OF ALASKA.** By L. W. Storm. E. & M. J., vol. 90, p. 272. 9½ columns. I.
- THE BERING RIVER COAL DEPOSITS, ALASKA.** By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.
- CONTROLLER BAY COAL FIELD, ALASKA.** By G. W. Evans. M. & M., vol. 30, p. 449, 8 columns, I.; p. 552, 6½ columns, I.
- COAL FIELDS OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 259, p. 172. 3½ pages.
- COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- GEOLOGY AND COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- COAL DEPOSITS OF THE SKEENA RIVER.** J. C. M. I., vol. 10, p. 223. 6 pages. Map.
- THE COAL FIELDS OF THE KACHEMAK BAY REGION.** By R. W. Stone. U. S. G. S., Bull. 277. 88 pages. I. 1906.
- A RECONNAISSANCE OF THE MATANUSKA COAL FIELD, ALASKA, IN 1905.** By G. C. Martin. U. S. G. S., Bull. 289. 36 pages. I. 1906.
- THE ARKANSAS COAL FIELD.** By A. J. Collier. U. S. G. S., Bull. 316, p. 137. 25 pages. I. 1906.
- THE ARKANSAS COAL FIELD.** By A. J. Collier. U. S. G. S., Bull. 326. 158 pages. I. 1907.
- REMARKS ON THE BROWN COAL BEDS AND ASSOCIATED DEPOSITS OF THE WERRIBEE PLAINS, VICTORIA.** By A. E. Kitson. T. Au. I. M. E., vol. 8, pt. 2, p. 255. 12 pages.
- NOTES ON VICTORIAN BROWN COAL BEDS.** By J. Stirling. T. Au. I. M. E., vol. 1, p. 35. 21½ pages. I.
- NEW COALFIELD IN BRITISH COLUMBIA.** E. & M. J., vol. 85, p. 544. ½ column.
- THE HOSMER MINES, LIMITED, BRITISH COLUMBIA: Coal.** By H. H. Yuill. J. C. M. I., vol. 13, p. 230. 27 pages. I. Maps.
- THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA.** By M. Roberts. T. A. I. M. E., vol. 40, p. 798. 6 pages. I.
- THE CLASSIFICATION OF NICOLA VALLEY COALS, BRITISH COLUMBIA.** By

- S. J. Castleman. J. C. M. I., vol. 13, p. 600. 3 pages.
- COAL MINING IN CALIFORNIA. Min. & Sci. Press, vol. 95, p. 186. $\frac{1}{2}$ column.
- COAL IN THE MOUNT DIABLO RANGE, MONTEREY COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 285, p. 223. 2 pages. I. 1905.
- COAL OF STONE CANYON, MONTEREY COUNTY, CALIFORNIA. By M. R. Campbell. U. S. G. S., Bull. 316, p. 435. 4 pages. 1906.
- THE COALFIELDS OF CANADA. By P. Thompson. E. & M. J., vol. 88, p. 1271. 2 columns.
- COAL AREAS IN THE CANADIAN NORTH-WEST. E. & M. J., vol. 90, p. 548. 4 columns.
- MINING AT LITHBRIDGE, ALBERTA. By A. T. Shurick. M. & M., vol. 31, p. 635. 2 columns. I.
- THE COALFIELDS OF ALBERTA AND SASKATCHEWAN. By P. Thompson. E. & M. J., vol. 88, p. 17. $3\frac{1}{2}$ columns.
- THE COALS AND COAL FIELDS OF ALBERTA, SASKATCHEWAN AND MANITOBA. By D. B. Dowling. J. C. M. I., vol. 10, p. 227. 13 pages. I. Map.
- THE GALT COAL FIELD, ALBERTA, CANADA. By W. D. L. Hardie. J. C. M. I., vol. 13, p. 190. $5\frac{1}{2}$ pages. D.
- THE DAN RIVER COALFIELD IN NORTH CAROLINA. E. & M. J., vol. 89, p. 1239. 2 columns.
- THE COAL LANDS OF THE DEEP RIVER COMPANY IN NORTH CAROLINA. By W. R. Johnson. Min. Mag., vol. 1, p. 352. 13 pages.
- GEOLOGICAL FEATURES OF THE COAL FIELDS OF CHILE. T. I. M. E., vol. 38, p. 34. 4 pages.
- THE COAL FIELDS AND COLLIERIES OF THE REPUBLIC OF CHILE. By A. Russell. T. I. M. E., vol. 38, p. 29. 54 pages. I.
- COAL IN CHINA. Min. & Sci. Press, vol. 20, p. 42. $\frac{1}{2}$ column.
- COAL MINING IN MANCHURIA. By T. T. Read. Min. Mag., London, vol. 1, p. 215. 8 columns. I.
- THE FUSHUN COLLIERY, SOUTH MANCHURIA. By W. A. Moller. T. A. I. M. E., vol. 41, p. 241. 4 pages.
- THE PINGHSIANG COLLIERY, CHINA. By K. P. Swensen. Min. & Sci. Press, vol. 101, p. 564. 7 columns. I.
- COAL MINING IN CHINA. By T. T. Read. Min. & Sci. Press, vol. 98, p. 44. 5 columns. Map.
- MINING IN NORTHERN CHINA. By F. L. Cole. Min. & Sci. Press, vol. 98, p. 584. $4\frac{1}{2}$ columns. Map.
- THE COAL FIELDS BETWEEN SHAN HAI KUAN AND MUKDEN, NORTH CHINA. By W. A. Moller. T. I. M. E., vol. 38, p. 460. 15 pages. I.
- COAL MINING IN NORTH CHINA. E. & M. J., vol. 85, p. 366. $2\frac{1}{2}$ columns.
- COAL DEPOSITS IN COLOMBIA. Min. & Sci. Press, vol. 98, p. 220. $1\frac{1}{2}$ columns. I.
- PICTOU COAL FIELD LORE. M. & M., vol. 31, p. 179. $\frac{1}{2}$ column.
- THE YAMPA COAL FIELD, ROUTT COUNTY, COLORADO. By N. M. Fenneman and H. S. Gale. U. S. G. S., Bull. 285, p. 226. 14 pages. I. 1905.
- THE SOUTH PARK COAL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 307. 10 pages. I. 1908.
- THE GRAND MESA COAL FIELD, COLORADO. By W. T. Lee. U. S. G. S., Bull. 341, p. 316. 17 pages. I. 1907.
- COAL FIELDS OF THE DANFORTH HILLS AND GRANDHOGBACK IN NORTH-WESTERN COLORADO. By H. S. Gale. U. S. G. S., Bull. 316, p. 264. 40 pages. I. 1906.
- THE TRINIDAD COAL-FIELD, COLORADO. By G. B. Richardson. U. S. G. S., Bull. 381, p. 379. 68 pages. I. 1908.

- ROUTT COUNTY, COLORADO, COALS.** By R. L. Herrick. M. & M., vol. 29, p. 230. 9½ columns. I.
- THE CAÑON CITY COAL FIELD, COLORADO.** By C. W. Washburne. U. S. G. S., Bull. 381, p. 341. 38 pages. I. 1908.
- THE COLORADO SPRINGS COAL FIELD, COLORADO.** By M. L. Goldman. U. S. G. S., Bull. 381, p. 317. 24 pages. I. 1908.
- COAL OF THE DENVER BASIN, COLORADO.** By G. C. Martin. U. S. G. S., Bull. 381, p. 297. 10 pages. 1908.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW MEXICO.** By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO.** By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- THE DURANGO COAL DISTRICT, COLORADO.** By J. A. Taff. U. S. G. S., Bull. 316, p. 321. 18 pages. I. 1906.
- THE BOOK CLIFFS COAL FIELD, BETWEEN GRAND RIVER, COLORADO, AND SUNNYSIDE, UTAH.** By G. B. Richardson. U. S. G. S., Bull. 316, p. 302. 18 pages. I. 1906.
- RECONNAISSANCE OF THE BOOK CLIFFS COAL FIELD.** By G. B. Richardson. U. S. G. S., Bull. 371. 54 pages. I. 1909.
- MINING COAL IN SOUTHERN COLORADO.** By K. S. Guiterman. E. & M. J., vol. 88, p. 1009. 20½ columns. I.
- COAL FIELDS OF SOUTHERN COLORADO.** M. & M., vol. 30, p. 588. 3½ columns. I.
- COAL MINING AT PRIMERO, COLORADO.** By R. L. Herrick. M. & M., vol. 30, p. 598. 2½ columns. I.
- THE DELAGUA COAL MINES, COLORADO.** By F. W. Whiteside. M. & M., vol. 29, p. 317. 4½ columns. I.
- THE NORTH-DAKOTA-MONTANA LIGNITE AREA.** By A. G. Leonard. U. S. G. S., Bull. 285, p. 316. 14 pages. 1905.
- THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA.** By A. G. Leonard and C. D. Smith. U. S. G. S., Bull. 341, p. 15. 21 pages. I. 1907.
- THE WASHBURN LIGNITE FIELD, NORTH DAKOTA.** By C. D. Smith. U. S. G. S., Bull. 381, p. 19. 11 pages. I. 1908.
- THE FORT BERTHOLD INDIAN RESERVATION LIGNITE FIELD, NORTH DAKOTA.** By C. D. Smith. U. S. G. S., Bull. 381, p. 30. 10 pages. I. 1908.
- THE KENT COALFIELD IN ENGLAND.** E. & M. J., vol. 87, p. 910. 1½ columns.
- THE WEMYSS COAL-FIELD, ENGLAND.** By J. Gemmell. T. I. M. E., vol. 36, p. 555. 20 pages.
- SCOTTISH "EENIE" COAL.** By C. T. Clough. T. I. M. E., vol. 37, p. 2. 10 pages. I.
- UPPER SILESIA COAL MINES.** By F. Haas. M. & M., vol. 30, p. 471. 5½ columns.
- BIBLIOGRAPHY OF ILLINOIS COAL AND ITS UTILIZATION.** J. W. Soc. E., vol. 14, p. 326. 2½ pages.
- STUDIES OF ILLINOIS COALS.** By H. F. Bain. T. A. I. M. E., vol. 40, p. 3. 72 pages. I.
- ILLINOIS COAL STATISTICS.** M. & M., vol. 31, p. 357. ½ column.
- THE COAL MINING INDUSTRY IN ILLINOIS DURING 1908.** E. & M. J., vol. 88, p. 77. 4 columns.
- THE KINGSTON COAL MINES, PEORIA COUNTY, ILLINOIS.** By C. S. Richardson. Min. Mag., vol. 4, p. 379, 7½ pages; vol. 5, p. 1, 24 pages.
- THE ILLINOIS COAL FIELD.** By A. Bement. J. W. Soc. E., vol. 14, p. 305. 70 pages. I.

- THE COAL RESOURCES OF ILLINOIS.** T. A. I. M. E., vol. 40, p. 7. 10 pages. I.
- THE ILLINOIS COAL FIELD.** By A. Bement. M. & M., vol. 30, p. 709. 7 columns. I.
- THE ILLINOIS COAL FIELD.** By H. H. Stoek. M. & M., vol. 31, p. 54. 6 columns. Map.
- COAL INVESTIGATION IN THE SALINE-GALLATIN FIELD, ILLINOIS, AND THE ADJOINING AREA.** By F. W. De Wolf. U. S. G. S., Bull. 316, p. 116. 20 pages. I. 1906.
- STRATIGRAPHY AND COAL BEDS OF THE INDIANA COAL FIELD.** By G. H. Ashley. U. S. G. S., Bull. 381, p. 9. 10 pages. 1908.
- MINING COAL IN SOUTHERN INDIANA.** By F. W. Parsons. E. & M. J., vol. 90, p. 869. 11 columns. I.
- COALFIELDS OF IOWA AND MISSOURI.** By H. Hinds. M. & M., vol. 31, p. 80. 4½ columns. I. Map.
- NOTES ON THE TAKASIMA COAL MINES, NAGASAKI, JAPAN.** By E. W. Nardin. T. Au. I. M. E., vol. 8, pt. 1, p. 81. 6 pages. I.
- SOUTHERN KANSAS COAL DISTRICT.** By L. L. Wittich. M. & M., vol. 31, p. 668. 7½ columns. I.
- THE KANSAS STATE COAL MINE.** By C. M. Young. E. & M. J., vol. 89, p. 1159. 9½ columns. I.
- COAL RESOURCES OF THE KENOVA QUADRANGLE, KENTUCKY.** By W. C. Phalen. U. S. G. S., Bull. 285, p. 259. 10 pages. I. 1905.
- THE ELKHORN COAL FIELD, KENTUCKY.** By R. W. Stone. U. S. G. S., Bull. 316, p. 42. 15 pages. I. 1906.
- THE MIDDLESBORO COALFIELD IN KENTUCKY.** By J. Howard. E. & M. J., vol. 88, p. 314. 8 columns. I.
- GEOLOGY AND MINERAL RESOURCES OF THE CUMBERLAND GAP COAL FIELD, KENTUCKY.** By G. H. Ashley and L. C. Glenn. U. S. G. S., Professional Paper 49, 239 pages. I. 1906.
- COAL RESOURCES OF THE RUSSELL FORK BASIN (KENTUCKY-VIRGINIA).** By R. W. Stone. U. S. G. S., Bull. 348. 127 pages. I. 1908.
- THE MIDDLESBORO COAL FIELD, KENTUCKY.** By J. Howard. E. & M. J., vol. 85, p. 166. 10 columns. I.
- MINING COAL IN BIG STONE GAP FIELD, KENTUCKY.** By J. P. Shippen. E. & M. J., vol. 85, p. 1287. 11 columns. I.
- COAL MINES OF MEXICO.** By M. Schwarz. M. & M., vol. 29, p. 33. 3 columns. I.
- THE COAL INDUSTRY IN MEXICO.** By E. Ludlow. E. & M. J., vol. 88, p. 661. 10½ columns. I.
- COAL IN COAHUILA, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 96, p. 363. 3½ columns. Map.
- THE CARBONIFEROUS DEPOSITS OF NORTHERN COAHUILA.** By J. G. Aguilera. E. & M. J., vol. 88, p. 730. 9½ columns.
- COAL AND IRON EXPLORATIONS IN OAXACA, MEXICO.** By J. L. W. Birkinbine. E. & M. J., vol. 90, p. 668. 10½ columns. I.
- COALFIELDS OF IOWA AND MISSOURI.** By H. Hinds. M. & M., vol. 31, p. 80. 4½ columns. I. Map.
- THE COAL INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1055. 12 columns. I.
- THE COAL MINING INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 87, p. 845. 16½ columns. I.
- THE GREAT FALLS COAL FIELD, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 316, p. 161. 14 pages. I. 1906.
- THE GREAT FALLS COALFIELD IN MONTANA.** By A. T. Shurick. E. & M. J., vol. 87, p. 587. 10½ columns. I.
- THE GREAT FALLS COAL FIELD OF MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 356. 87 pages. I. 1909.

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- DEVELOPMENT OF THE BEAR CREEK COAL FIELDS, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 285, p. 269. 2 pages. 1905.
- COAL NEAR THE CRAZY MOUNTAINS, MONTANA.** By R. W. Stone. U. S. G. S., Bull. 341, p. 78. 14 pages. I. 1907.
- THE BULL MOUNTAIN COAL FIELD, MONTANA.** By L. H. Woolsey. U. S. G. S., Bull. 341, p. 62. 16 pages. I. 1907.
- THE MILES CITY COAL FIELD, MONTANA.** By A. J. Collier and C. D. Smith. U. S. G. S., Bull. 341, p. 36. 26 pages. I. 1907.
- THE COAL FIELDS OF PART OF DAWSON, ROSEBUD, AND CUSTER COUNTIES, MONTANA.** By A. G. Leonard. U. S. G. S., Bull. 316, p. 194. 18 pages. I. 1906.
- COALS OF CARBON COUNTY, MONTANA.** By N. H. Darton. U. S. G. S., Bull. 316, p. 174. 20 pages. I. 1906.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 341, p. 108. 15 pages. I. 1907.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909.
- THE MILK RIVER COAL FIELD, MONTANA.** By L. J. Pepperberg. U. S. G. S., Bull. 381, p. 82. 26 pages. I. 1908.
- THE CENTRAL PART OF THE BULL MOUNTAIN COAL FIELD, MONTANA.** By R. W. Richardson. U. S. G. S., Bull. 381, p. 60. 22 pages. I. 1908.
- THE FORT PECK INDIAN RESERVATION LIGNITE FIELD, MONTANA.** By C. D. Smith. U. S. G. S., Bull. 381, p. 40. 20 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA.** By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- THE RED LODGE COAL FIELD, MONTANA.** By E. G. Woodruff. U. S. G. S., Bull. 341, p. 92. 16 pages. I. 1907.
- NOTES ON THE COALS OF THE CUSTER NATIONAL FOREST, MONTANA.** By C. H. Wegemann. U. S. G. S., Bull. 381, p. 108. 7 pages. I. 1908.
- THE COAL MINES OF DAWSON, NEW MEXICO.** By J. E. Sheridan. M. & M., vol. 31, p. 653. 9½ columns. I.
- THE ENGLE COAL FIELD, NEW MEXICO.** By W. T. Lee. U. S. G. S., Bull. 285, p. 240. 1 page. 1905.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO.** By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- A RECONNAISSANCE SURVEY OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO.** By M. K. Shaler. U. S. G. S., Bull. 316, p. 376. 50 pages. I. 1906.
- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL CO., DAWSON, NEW MEXICO.** By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- THE UNA DELL GATO COAL FIELD, SANDOVAL COUNTY, NEW MEXICO.** By M. R. Campbell. U. S. G. S., Bull. 316, p. 427. 4 pages. I. 1906.
- COAL IN THE VICINITY OF FORT STANTON RESERVATION, LINCOLN COUNTY, NEW MEXICO.** By M. K. Campbell. U. S. G. S., Bull. 316, p. 431. 4 pages. I. 1906.
- THE COAL FIELD BETWEEN GALLINA AND RATON SPRINGS, NEW MEXICO, IN THE SAN JUAN COAL REGION.** By J. H. Gardner. U. S. G. S., Bull. 341, p. 335. 17 pages. I. 1907.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW**

- MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE COAL FIELD BETWEEN GALLUP AND SAN MATEO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 364. 15 pages. I. 1907.
- ISOLATED COAL FIELD IN SANTA FE AND SAN MIGUEL COUNTIES, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 447. 5 pages. 1908.
- THE CARTHAGE COAL FIELD, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 452. 9 pages. I. 1908.
- THE COAL FIELD BETWEEN SAN MATEO AND CUBA, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 461. 13 pages. I. 1908.
- CARBONACEOUS COAL IN NEW MEXICO. By J. H. Gardner. M. & M., vol. 30, p. 570. 2½ columns. I.
- THE RICH COALFIELDS IN NEW MEXICO. E. & M. J., vol. 86, p. 1251. 1½ columns.
- THE COAL MINES AND PLANT OF THE STAG CAÑON FUEL COMPANY, DAWSON, NEW MEXICO. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- COAL MINING IN PICTOU COUNTY, NOVA SCOTIA. By H. E. Coll. E. & M. J., vol. 85, p. 1101. 7 columns. I.
- DOMINION No. 2 COLLIERY OF THE DOMINION COAL COMPANY. By A. G. Haultain. J. C. M. I., vol. 13, p. 641. 14 pages. I.
- THE OKLAHOMA COAL FIELDS. By C. N. Gould. M. & M., vol. 29, p. 275. 2½ columns. I.
- COAL MINING IN OKLAHOMA. By W. P. Thomas. M. & M., vol. 31, p. 193. 5 columns. I. Map.
- GEOLOGY OF THE MCALESTER COAL FIELD, INDIAN TERRITORY: By J. A. Taff. U. S. G. S., 19th Ann. Rept., pt. 3. pp. 423-600. 1897-98. I.
- GEOLOGY OF EASTERN CHOCTOU COAL FIELD, INDIAN TERRITORY. By J. A. Taff and G. I. Adams. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 257-311. 1899-1900. I.
- A COAL PROSPECT ON WILLOW CREEK, MORROW COUNTY, OREGON. By W. C. Mendenhall. U. S. G. S., Bull. 341, p. 406. 3 pages. 1907.
- THE ROGUE RIVER VALLEY COAL FIELD, OREGON. By J. S. Diller. U. S. G. S., Bull. 341, p. 401. 5 pages. I. 1907.
- A GENERAL VIEW OF THE ANTHRACITE COAL REGION OF PENNSYLVANIA. By H. W. Poole. Min. Mag., vol. 4, p. 245. 4 pages.
- THE LACKAWANNA COAL BASIN: Its Geology and Mining Resources around Scranton, Pennsylvania. By H. D. Rogers. Min. Mag., vol. 2, p. 388, 6 pages; p. 475, 15 pages, I.; p. 609, 12 pages.
- PROPERTY OF THE SHORT MOUNTAIN COAL COMPANY, LYKENS VALLEY, PENNSYLVANIA. Min. Mag., vol. 1, p. 468. 7½ pages.
- THE SOUTHERN ANTHRACITE COAL-FIELD. By J. H. Haerther. E. & M. J., vol. 85, p. 653. 9 columns. I.
- ANTHRACITE COAL MINING. By H. C. Chance. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- COAL MINING IN SOUTHERN ANTHRACITE FIELD. By T. F. Downing. E. & M. J., vol. 86, p. 475. 10 columns. I.
- MOREA COLLIERY BASIN, NORTHEASTERN PENNSYLVANIA. M. & M., vol. 30, p. 730. 1½ columns. I.
- THE TUNUNGWANT COAL FIELD OF MCKEAN COUNTY, PENNSYLVANIA. By D. D. Owen. Min. Mag., vol. 9, p. 244, 12 pages; p. 306, 10 pages.
- THE LYCOMING IRON AND COAL COMPANY, PENNSYLVANIA. Min. Mag., vol. 1, p. 455. 13½ pages.

- THE COAL LANDS OF THE CLINTON COUNTY COAL COMPANY, PENNSYLVANIA. *Min. Mag.*, vol. 3, p. 513. 5½ pages.
- SMITHING COAL OF PENNSYLVANIA. 2d. *Geol. Rept. Pa.*, G, p. 202. 10 pages.
- THE SAGMORE BITUMINOUS COAL MINES, CLEARFIELD DISTRICT, PENNSYLVANIA. By E. K. Judd. *E. & M. J.*, vol. 85, p. 605. 6 columns. I.
- A TYPICAL RIVER MINE IN PENNSYLVANIA. By F. W. Parsons. *E. & M. J.*, vol. 89, p. 326. 18 columns. I.
- DONOHUE COKE COMPANY, NEAR GREENSBURG, PENNSYLVANIA. By C. R. King. *M. & M.*, vol. 29, p. 445. 7½ columns. I.
- BUFFALO-SUSQUEHANNA SAGAMORE MINE. By R. D. N. Hall. *M. & M.*, vol. 31, p. 645. 8½ columns. I.
- THE JENNER MINE OF THE SOMERSET COAL COMPANY, PENNSYLVANIA. By J. L. Wagner. *M. & M.*, vol. 29, p. 323. 2½ columns. I.
- COAL RESOURCES OF JOHNSTOWN, PENNSYLVANIA AND VICINITY. By W. C. Phalen. *U. S. G. S.*, Bull. 316, p. 20. 22 pages. I. 1906.
- COALS OF THE CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA. By E. F. Lines. *U. S. G. S.*, Bull. 316, p. 13. 9 pages. I. 1906.
- THE PUNKSUTAWNEY AND GLEN CAMPBELL COAL FIELDS OF INDIANA AND JEFFERSON COUNTIES, PENNSYLVANIA. By F. B. Peck and G. H. Ashley. *U. S. G. S.*, Bull. 285, p. 276. 4 pages. 1905.
- CLEARFIELD COAL FIELD, PENNSYLVANIA. By G. H. Ashley. *U. S. G. S.*, Bull. 285, p. 271. 5 pages. I. 1905.
- THE MARIANNA COAL MINES. By H. M. Phelps. *M. & M.*, vol. 31, p. 523. 7½ columns. I.
- THE COAL DEPOSITS OF PERU. By Z. C. B. Borljkjof. *E. & M. J.*, vol. 88, p. 983. 1½ columns.
- PHILIPPINE COAL MINES. *Min. & Sci. Press*, vol. 100, p. 323. 2 columns.
- MINING COAL IN THE PHILIPPINE ISLANDS. By R. Hawxhurst. *E. & M. J.*, vol. 88, p. 879. 4 columns.
- PHILIPPINE COAL FIELDS. By J. B. Dilworth. *T. A. I. M. E.*, vol. 39, p. 653. 11 pages. I.
- PHILIPPINE COALS. By A. J. Cox. *E. & M. J.*, vol. 86, p. 1058. 4 columns.
- THE COAL FIELDS OF BRISTOL COUNTY AND OF RHODE ISLAND. By E. Hitchcock. *Min. & Mag.*, vol. 1, p. 582. 10 pages.
- COAL MINING ON THE KIRGHESSE STEPPE IN THE AKMOKINSK DISTRICT OF SOUTH-WESTERN SIBERIA. By E. Watson. *T. I. M. E.*, vol. 37, p. 124. 10 pages. I.
- MINING COAL IN SPITZBERGEN, NORWAY. By T. Collot. *E. & M. J.*, vol. 88, p. 1274. 2 columns. I.
- THE WIND ROCK COAL MINE, TENNESSEE. By W. S. Hutchinson. *M. & M.*, vol. 31, p. 1. 6 columns. I.
- COAL IN TENNESSEE. *Min. Mag.*, vol. 8, p. 450. 10 pages.
- THE CUMBERLAND COAL FIELDS, TENNESSEE. By J. P. Lestey. *Min. Mag.*, vol. 5, p. 45. 13 pages. I.
- COAL IN TURKEY. *Min. & Sci. Press*, vol. 98, p. 821. 3 columns.
- THE COAL FIELDS OF THE UNITED STATES. By M. R. Campbell and E. W. Parker. *T. A. I. M. E.*, vol. 40, p. 253. 8 pages.
- THE COALFIELDS OF THE UNITED STATES. *E. & M. J.*, vol. 87, p. 160. 8 columns. I.
- PACIFIC COAST COALS. *Min. & Sci. Press*, vol. 22, p. 216. ½ column.
- ANTHRACITE COAL ON THE PACIFIC COAST. *E. & M. J.*, vol. 90, p. 920. 1 column. I.

- COAL MINING IN THE MIDDLE WEST.** By G. H. Cushing. Min. & Sci. Press, vol. 100, p. 130. $3\frac{1}{2}$ columns.
- FUEL IN THE INTERMOUNTAIN REGION.** By D. Harrington. M. & M., vol. 29, p. 493. $4\frac{1}{2}$ columns.
- THE BARREN ZONE OF THE NORTHERN APPALACHIAN COALFIELD.** By I. C. White. E. & M. J., vol. 87, p. 509. $1\frac{1}{2}$ columns.
- THE NORTHERN APPALACHIAN COALFIELD.** By R. N. Hosler. E. & M. J., vol. 89, p. 1122. $8\frac{1}{2}$ columns.
- THE COAL FIELDS OF THE UNITED STATES.** By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- COAL BEDS OF PLEASANT VALLEY, UTAH.** E. & M. J., vol. 85, p. 964. $\frac{1}{2}$ column.
- THE PLEASANT VALLEY COAL DISTRICT, CARBON AND EMERY COUNTIES, UTAH.** By J. A. Taff. U. S. G. S., Bull. 316, p. 338. 21 pages. D. 1906.
- COAL FIELDS OF NORTHWESTERN COLORADO AND NORTHEASTERN UTAH.** By H. S. Gale. U. S. G. S., Bull. 341, p. 283. 35 pages. I. 1907.
- COAL FIELDS OF NORTHEASTERN COLORADO AND NORTHWESTERN UTAH.** By H. S. Gale. U. S. G. S., Bull. 415. 265 pages. I. 1910.
- NOTES ON THE WEBER RIVER COAL FIELD, UTAH.** By J. A. Taff. U. S. G. S., Bull. 285, p. 285. 4 pages. 1905.
- COAL IN SANPETE COUNTY, UTAH.** By G. B. Richardson. U. S. G. S., Bull. 285, p. 280. 7 pages. I. 1905.
- THE IRON COUNTY COAL FIELD, UTAH.** By W. T. Lee. U. S. G. S., Bull. 316, p. 359. 20 pages. I. 1906.
- THE HARMONY, CLOB, AND KANAB COAL FIELDS, SOUTHERN UTAH.** By G. B. Richardson. U. S. G. S., Bull. 341, p. 379. 22 pages. I. 1907.
- BOOK CLIFFS COAL FIELD, UTAH, WEST OF GREEN RIVER.** By J. A. Taff. U. S. G. S., Bull. 285, p. 289. 14 pages. I. 1905.
- CONSOLIDATED FUEL COMPANY, UTAH.** By R. J. Turner. M. & M., vol. 31, p. 385. 4 columns. I.
- THE POCKET COAL DISTRICT, VIRGINIA, IN THE LITTLE BLACK MOUNTAIN COAL FIELD.** By C. A. Fisher. U. S. G. S., Bull. 341, p. 409. 10 pages. I. 1907.
- THE RUSSELL FORK COAL FIELD, VIRGINIA.** By R. W. Stone. U. S. G. S., Bull. 316, p. 55. 14 pages. I. 1906.
- THE COAL RESOURCES OF WASHINGTON.** By R. P. Tarr. M. & M., vol. 30, p. 17, 6 columns, I.; p. 108, 6 columns, I.; p. 135, 7 columns, I.; p. 311. 8 columns, I.
- NOTES ON THE COAL INDUSTRY IN WEST VIRGINIA.** By R. B. Brinsmade. E. & M. J., vol. 90, p. 775. $4\frac{1}{2}$ columns.
- UPPER POTOMAC COAL FIELDS, WEST VIRGINIA.** By H. H. Stoeck. M. & M., vol. 30, p. 201. 8 columns. I.
- COAL MINING IN CENTRAL WEST VIRGINIA.** By F. W. Parsons. E. & M. J., vol. 87, p. 1284. 16 columns. I.
- COAL FIELDS OF CENTRAL WEST VIRGINIA.** By H. H. Stoeck. M. & M., vol. 30, p. 188. 10 columns. I.
- COAL FIELDS OF WEST VIRGINIA.** By H. H. Stoeck. M. & M., vol. 29, p. 219, $6\frac{1}{2}$ columns, I.; p. 283, $7\frac{1}{2}$ columns, I. Map; p. 303, $8\frac{1}{2}$ columns, I.; p. 509, $11\frac{1}{2}$ columns, I.
- THE KANAWHA REGION, WEST VIRGINIA.** By H. H. Stoeck. M. & M., vol. 30, p. 36, 9 columns, I.; p. 70, $8\frac{1}{2}$ columns, I.
- COAL MINING IN KANAWHA VALLEY, WEST VIRGINIA.** By S. M. Buck. U. S. G. S., Mineral Resources, 1883 and 1884.

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- NEW RIVER COALFIELD, WEST VIRGINIA. By H. H. Stoeck. M. & M., vol. 29, p. 509. 11½ columns. I.
- CORRELATION THACKER FIELD, WEST VIRGINIA. By A. H. Stow. M. & M., vol. 31, p. 83. 4½ columns. I.
- THE THICKEST COAL SEAM: Wyoming. E. & M. J., vol. 86, p. 1169. ¼ column.
- A MODEL COAL MINING PLANT IN WYOMING. By H. M. Payne. E. & M. J., vol. 90, p. 224. 8½ columns. I.
- COAL AND OIL IN SOUTHERN UINTA COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE WESTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball. U. S. G. S., Bull. 341, p. 243. 12½ pages. I. 1907.
- THE EASTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball and E. Stebinger. U. S. G. S., Bull. 381, p. 186. 28 pages. I. 1908.
- THE NORTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 341, p. 256. 27 pages. I. 1907.
- THE SOUTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 381, p. 214. 68 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA. By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- COAL FIELDS OF THE SOUTHWEST SIDE OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 341, p. 200. 18 pages. I. 1907.
- THE COAL FIELD IN THE SOUTHEASTERN PART OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 381, p. 170. 16 pages. I. 1908.
- COAL FIELDS OF EAST-CENTRAL CARBON COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 316, p. 244. 16 pages. I. 1906.
- COAL FIELDS IN A PORTION OF CENTRAL UINTA COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 316, p. 212. 30 pages. I. 1906.
- THE BUFFALO COAL FIELD, WYOMING. By H. S. Gale and C. H. Wegeman. U. S. G. S., Bull. 381, p. 137. 32 pages. I. 1908.
- THE EASTERN PART OF THE GREAT DIVIDE BASIN COAL FIELD, WYOMING. By E. E. Smith. U. S. G. S., Bull. 341, p. 220. 23 pages. I. 1907.
- THE POWDER RIVER COAL FIELD, WYOMING, ADJACENT TO THE BURLINGTON RAILROAD. By R. W. Stone and C. T. Lupton. U. S. G. S., Bull. 381, p. 115. 22 pages. I. 1908.
- COAL OF LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 316, p. 261, 3 pages. 1906.
- COAL AND OIL IN SOUTHERN UINTA COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE SHERIDAN COAL FIELD, WYOMING. By J. A. Taff. U. S. G. S., Bull. 341, p. 123. 14 pages. 1907.
- GEOGRAPHY AND GEOLOGY OF A PORTION OF SOUTHWESTERN WYOMING, WITH SPECIAL REFERENCE TO COAL AND OIL. By A. C. Veatch. U. S. G. S., Professional Paper 56, 178 pages. I. 1907.
- THE COAL MINES OF SOUTHERN WYOMING. By F. W. Parsons. E. & M. J., vol. 85, p. 118. 6½ columns. I.
- THE DIAMONDVILLE COALFIELD, WYOMING. By A. T. Shurick. E. & M. J., vol. 85, p. 116. 6 columns. I.

- THE GLENROCK COAL FIELD, WYOMING.** By E. W. Shaw. U. S. G. S., Bull. 341, p. 151. 14 pages. I. 1907.
- THE LANDER COAL FIELD, WYOMING.** By E. G. Woodruff. U. S. G. S., Bull. 316, p. 242. 2 pages. 1906.
- See also **MAPS OF COUNTRIES AND DISTRICTS.**
- See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.**
- See also **THE COAL TRADE.**
- Occurrence of Copper and Copper Ores**
- COPPER PROSPECTS.** By T. L. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 305, 9 columns, I.; vol. 6, p. 80, $\frac{1}{2}$ column; p. 111, $1\frac{1}{2}$ columns.
- KATANGA COPPER BELT, BELGIAN CONGO.** By F. E. Studt. Min. & Sci. Press, vol. 99, p. 857. $1\frac{1}{2}$ columns.
- THE COPPER DEPOSITS OF KATANGA, CONGO.** E. & M. J., vol. 86, p. 1049. 2 columns.
- THE COPPER MINES OF KATANGA, CONGO FREE STATE.** E. & M. J., vol. 85, p. 202. $3\frac{1}{2}$ columns.
- COPPER IN THE BELGIAN CONGO.** T. A. I. M. E., vol. 41, p. 196. 8 pages. I.
- COPPER DEPOSITS OF PRINCE WILLIAM SOUND, ALASKA.** By U. S. Grant. Min. & Sci. Press, vol. 100, p. 63. 4 columns. I.
- COPPER MINING AND PROSPECTING OF PRINCE WILLIAM SOUND.** By G. G. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 87. 10 pages. I. 1908.
- NOTES ON COPPER PROSPECTS OF PRINCE WILLIAM SOUND.** By F. H. Moffit. U. S. G. S., Bull. 345, p. 176. 3 pages. I. 1907.
- OPENING OF THE CHITINA COPPER BELT IN ALASKA.** By D. Donohoe. E. & M. J., vol. 90, p. 1306. 6 columns. I.
- CHITINA COPPER REGION IN SOUTHERN ALASKA.** By L. W. Storm. E. & M. J., vol. 90, p. 1011. $7\frac{1}{2}$ columns. Map.
- CHITINA VALLEY COPPER DEPOSITS, ALASKA.** By E. Jacobs. M. & M., vol. 31, p. 315. $6\frac{1}{2}$ columns. I.
- OCCURRENCE OF COPPER IN CHITINA VALLEY, ALASKA.** M. & M., vol. 31, p. 315. $6\frac{1}{2}$ columns. I.
- BONANZA COPPER MINE, ALASKA.** By V. H. Wilhelm. Min. & Sci. Press, vol. 101, p. 569. $2\frac{1}{2}$ columns. I.
- BONANZA COPPER MINE ALASKA.** By V. H. Wilhelm. M. & M., vol. 31, p. 441. $1\frac{1}{2}$ columns. Map.
- COPPER DEPOSITS OF WHITE HORSE.** By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 778. $3\frac{1}{2}$ columns I.
- THE WHITE HORSE COPPER BELT, YUKON TERRITORY.** E. & M. J., vol. 89, p. 963. $2\frac{1}{2}$ columns.
- WHITE RIVER COPPER PROPERTIES.** By G. A. R. Lewington. Min. & Sci. Press, vol. 99, p. 755. $2\frac{1}{2}$ columns. I.
- THE KENNICOTT BONANZA COPPER MINE, ALASKA.** By L. W. Storm. E. & M. J., vol. 89, p. 1224. $9\frac{1}{2}$ columns. I.
- COPPER DEPOSITS ON KASAAN PENINSULA, PRINCE OF WALES ISLAND.** By C. W. Wright and S. Paige. U. S. G. S., Bull. 345, p. 98. 18 pages. I. 1907.
- RECENT DEVELOPMENTS IN CLIFTON-MORENCI DISTRICT, ARIZONA.** By A. W. Hixson. E. & M. J., vol. 85, p. 251. $1\frac{1}{2}$ columns.
- ORE DEPOSITS OF THE CLIFTON-MORENCI DISTRICT OF ARIZONA.** Min. & Sci. Press, vol. 101, p. 770. $6\frac{1}{2}$ columns. Map.
- COPPER DEPOSITS OF SILVERBELL, ARIZONA.** By C. F. Tolman. Min. & Sci. Press, vol. 99, p. 710. 5 columns. I.
- THE MIAMI COPPER MINE, ARIZONA.** By R. L. Herrick. M. & M., vol. 30, p. 80. $9\frac{1}{2}$ columns. I.

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- MINING AT MIAMI, ARIZONA. By R. L. Herrick. *M. & M.*, vol. 30, p. 751. 12 columns. I.
- COPPER MINING IN METCALF DISTRICT, ARIZONA. By P. B. Scotland. *E. & M. J.*, vol. 90, p. 118. 16 columns. I.
- DISSEMINATED CHALCOCITE DEPOSITS AT RAY, ARIZONA. By C. F. Tolman, Jr. *Min. & Sci. Press*, vol. 99, p. 622. 5½ columns. I.
- RAY COPPER DISTRICT, ARIZONA. By W. H. Truesdale. *Min. & Sci. Press*, vol. 98, p. 794. 7½ columns. I.
- UNITED VERDE MINE, ARIZONA. By L. C. Craton. *Min. & Sci. Press*, vol. 96, p. 171. 1½ columns. Map.
- ORE DEPOSITS IN THE VICINITY OF PARKER, ARIZONA. *E. & M. J.*, vol. 88, p. 1171. 2 columns.
- THE SUPERIOR AND BOSTON MINE, ARIZONA. By R. L. Herrick. *M. & M.*, vol. 31, p. 112. 8½ columns. I.
- COPPER DEPOSITS OF THE GLOBE-KELVIN DISTRICTS, ARIZONA. By E. Higgins. *E. & M. J.*, vol. 89, p. 769, 11 columns, I.; p. 813, 9½ columns, I.; p. 870, 13½ columns, I.
- THE BISBEE COPPER FIELD. *Min. & Sci. Press*, vol. 99, p. 358. 3 columns. I.
- STANLEY BUTTE DISTRICT, ARIZONA. By F. Wolf, Jr. *Min. & Sci. Press*, vol. 101, p. 13. 1½ columns. Map.
- COURTLAND, ARIZONA, A NEW CAMP. By H. W. Chittenden. *E. & M. J.*, vol. 87, p. 312. 1½ columns.
- THE SOUTHERN ARIZONA COPPER FIELDS. By C. F. Tolman, Jr. *Min. & Sci. Press*, vol. 99, p. 356, 10 columns, I.; p. 390, 7½ columns, I.
- THE MOUNT LYELL MINING FIELD. By J. W. Gregory. *T. Au. I. M. E.*, vol. 10, p. 29. 169 pages.
- THE ORE DEPOSITS OF MOUNT LYELL: Copper Deposits. By J. W. Gregory. *T. Au. I. M. E.*, vol. 10, p. 113. 34 pages. I.
- NOTES ON MOUNT READ AND ITS SULPHIDE ORE BODIES. By L. Williams. *T. Au. I. M. E.*, vol. 8, pt. 1, p. 74. 6 pages.
- COPPER MINES IN CHILLAGOE DISTRICT, QUEENSLAND. By G. W. Williams. *E. & M. J.*, vol. 87, p. 1125. 6 columns. I.
- THE MANY PEAKS COPPER MINE, QUEENSLAND, AUSTRALIA. By J. B. Wilson. *E. & M. J.*, vol. 88, p. 872. 7½ columns. I.
- THE CLONCURRY COPPER DISTRICT, QUEENSLAND. By G. W. Williams. *E. & M. J.*, vol. 88, p. 155. 13½ columns. I.
- COBAR GOLD AND COPPER FIELD, NEW SOUTH WALES. By G. W. Williams. *E. & M. J.*, vol. 86, p. 957. 4 columns. I.
- BEDDED COPPER DEPOSITS OF CARANGAS, BOLIVIA. By R. Hawxhurst, Jr. *E. & M. J.*, vol. 90, p. 909. 12½ columns. I.
- NOTES ON THE TYEE COPPER MINE. By W. H. Weed. *E. & M. J.*, vol. 85, p. 199. 6½ columns. I.
- FURTHER OBSERVATIONS RELATIVE TO THE OCCURRENCE OF DEPOSITS OF COPPER ORE ON THE NORTH PACIFIC COAST AND ADJACENT ISLANDS, FROM THE SOUTHERN BOUNDARY OF BRITISH COLUMBIA TO THE ALASKAN PENINSULA. By W. M. Brewer. *J. C. M. I.*, vol. 10, p. 195. 14 pages.
- MINES OF THE GRANBY CONSOLIDATED, PHOENIX, BRITISH COLUMBIA. By R. H. Allen. *E. & M. J.*, vol. 88, p. 1260. 7 columns. I.
- THE OCCURRENCE OF COPPER IN SHASTA COUNTY, CALIFORNIA. By L. C. Craton. *U. S. G. S., Bull.* 430, p. 71. 40½ pages. I. 1909.
- THE BALAKLALA CONSOLIDATED COPPER COMPANY, CALIFORNIA. *E. & M. J.*, vol. 87, p. 501. 9 columns. I.
- PRIMARY CHALCOCITE IN CALIFORNIA. By O. H. Hershey. *Min. & Sci. Press*, vol. 96, p. 429. 3 columns.
- THE GENESIS OF THE COPPER ORES IN SHASTA COUNTY, WEST OF THE SACRAMENTO RIVER. By W. For-

- estner. Min. & Sci. Press, vol. 97, p. 261. 3 columns.
- COPPER MINES AND SMELTERIES OF SHASTA COUNTY, CALIFORNIA. By G. A. Packard. E. & M. J., vol. 88, p. 393. 20½ columns. I.
- THE CALAMA COPPER DISTRICT, CHILE. By F. A. Smith. M. & M., vol. 31, p. 473. 4 columns. I.
- THE BRADEN COPPER MINES, CHILE. By W. Braden. M. & M., vol. 30, p. 506. 1½ columns.
- THE COLLAHUASI COPPER DISTRICT, CHILE. By R. Hawxhurst. Min. Mag., London, vol. 3, p. 271. 14 columns. I.
- THE PODEROSA COPPER MINE, COLLAHUASI, CHILE. By Robt. Hawxhurst, Jr. E. & M. J., vol. 85, p. 490. 4 columns.
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 751. 15 pages. I.
- NOTES ON COPPER DEPOSITS IN CHAFFEE, FREMONT, AND JEFFERSON COUNTIES, COLORADO. By W. Lindgren. U. S. G. S., Bull. 340, p. 157. 18 pages. I. 1907.
- THE OLD BRISTOL COPPER MINE, CONNECTICUT. By C. S. Richardson. Min. Mag., vol. 3, p. 251. 5 pages.
- CANTON COPPER MINE, CHEROKEE COUNTY, GEORGIA. By J. Derby. Min. Mag., vol. 5, p. 395. 2½ pages.
- THE WHITE KNOB COPPER DEPOSITS, MACKAY, IDAHO. By J. F. Kemp and C. G. Gunther. T. A. I. M. E., vol. 38, p. 269. 29 pages. I.
- SNOWSTORM COPPER DEPOSIT, IDAHO. Min. & Sci. Press, vol. 97, p. 701. 2½ columns. I.
- NOTES ON THE FORT HALL MINING DISTRICT, IDAHO. By F. B. Weeks and V. C. Heikes. U. S. G. S., Bull. 340, p. 175. 10 pages. I. 1907.
- COPPER IN JAMAICA. Min. & Sci. Press, vol. 99, p. 299. ½ column.
- THE KAPSAM MINES, KOREA. Min. & Sci. Press, vol. 99, p. 666. 2½ columns.
- THE KOSAN MINE, KOREA. By A. D. Weigall. Min. & Sci. Press, vol. 97, p. 878. 2½ columns.
- THE KOSAKA COPPER MINE OF JAPAN. Min. & Sci. Press, vol. 101, p. 503. 1 column.
- THE CANANEA CONSOLIDATED COPPER COMPANY IN 1908. By L. D. Ricketts. E. & M. J., vol. 87, p. 701. 13 columns.
- REVIVAL IN URES, HERMOSILLO AND SAHUARIPA DISTRICTS, SONORA. By W. L. Wilson. E. & M. J., vol. 90, p. 661. 3 columns.
- SAN ANTONIO COPPER DISTRICT, SONORA, MEXICO. E. & M. J., vol. 90, p. 1301. 3½ columns. D.
- ORE DEPOSITS OF CANANEA MINING DISTRICT, MEXICO. By S. F. Emmons. E. & M. J., vol. 90, p. 402. 5 columns. Map.
- LOS PILARES MINE, NACOAARI, MEXICO. By C. De Kalb. Min. & Sci. Press, vol. 100, p. 887. 6½ columns. I.
- ORE DEPOSITS OF THE NACOAARI DISTRICT, MEXICO. E. & M. J., vol. 86, p. 658. 1½ columns.
- NACOAARI MINING DISTRICT, SONORA, MEXICO. By B. E. Russell. E. & M. J., vol. 86, p. 657. 16 columns. I.
- THE MAGISTRAL COPPER DISTRICT, MEXICO. By P. A. Babb. E. & M. J., vol. 88, p. 1215. 4½ columns. I.
- COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., 3d Ann. Rept., pp. 89-188. 1881-82. I.
- THE COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., Monograph V. 464 pages. I. 1883.
- THE LAKE SUPERIOR COPPER MINES. By J. A. Callender. Min. Mag., vol. 2, p. 249. 3 pages.

- FOOTHILL COPPER BELT OF THE SIERRA NEVADA.** By J. A. Reid. *Min. & Sci. Press*, vol. 96, p. 388. 9½ columns. I.
- THE YERINGTON DISTRICT, NEVADA.** By C. S. Durand. *M. & M.*, vol. 31, p. 24. 2½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA.** By J. A. Carpenter. *Min. & Sci. Press*, vol. 101, p. 4. 10½ columns. I.
- YERINGTON COPPER DISTRICT.** By F. L. Ransome. *Min. & Sci. Press*, vol. 100, p. 354. 4½ columns. Map.
- CONDITIONS IN THE YERINGTON COPPER DISTRICT, NEVADA.** By J. Tyssowski. *E. & M. J.*, vol. 89, p. 764. 6½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA.** By F. L. Ransome. *U. S. G. S.*, Bull. 380, p. 99. 21 pages. I. 1908.
- THE YERINGTON COPPER DEPOSITS.** By F. L. Ransome. *M. & M.*, vol. 30, p. 88. 6 columns. I.
- SECONDARY COPPER ORES OF THE LUDWIG MINE, YERINGTON, NEVADA.** By J. P. Jennings. *J. C. M. I.*, vol. 11, p. 463. 3½ pages.
- RAY CONSOLIDATED MINES, NEVADA.** By R. L. Herrick. *M. & M.*, vol. 29, p. 544. 6½ columns. I.
- COPPER MINING AT ELY, NEVADA.** By C. De Kalb. *Min. & Sci. Press*, vol. 98, p. 58. 6 columns. I.
- PRESENT CONDITIONS OF ELY.** *Min. & Sci. Press*, vol. 100, p. 866. 5½ columns. I.
- THE COPPER LODES OF NEW CALEDONIA.** By E. A. Weinberg. *T. Au. I. M. E.*, vol. 7, p. 138. 12 pages. I.
- COPPER MINING IN NEW JERSEY.** By H. B. Kümmel. *E. & M. J.*, vol. 87, p. 808. 2 columns.
- BURRO MOUNTAIN MINING DISTRICT, NEW MEXICO.** *E. & M. J.*, vol. 89, p. 1121. 3 columns. I.
- BURRO MOUNTAIN MINING DISTRICT.** By I. J. Stauber. *M. & M.*, vol. 30, p. 380. 4½ columns. I.
- THE COPPER DEPOSITS OF SOUTH MOUNTAIN IN SOUTHERN PENNSYLVANIA.** By G. W. Stose. *U. S. G. S.*, Bull. 430, p. 122. 10 pages. I. 1909.
- COPPER IN THE PHILIPPINES.** By W. D. Smith. *E. & M. J.*, vol. 89, p. 30. 1 column.
- THE ATBASAR COPPER DISTRICT.** By W. Pellew-Harvey. *Min. Mag.*, London, vol. 2, p. 59. 8 columns. I.
- NOTES ON THE ZANGEZOUR COPPER MINES.** By A. L. Simon. *T. I. M. & M.*, vol. 18, p. 413. 12 pages.
- THE RIO TINTO COPPER DISTRICT.** By J. W. Gregory. *T. Au. I. M. E.*, vol. 10, p. 165. 14 pages. I.
- DUCKTOWN COPPER DEPOSIT, TENNESSEE.** By J. W. Gregory. *T. Au. I. M. E.*, vol. 10, p. 182. 3½ pages.
- COPPER REGION OF TENNESSEE: A Sketch of the Geology of Tennessee.** By R. O. Currey. *Min. Mag.*, vol. 8, p. 156. 7 pages.
- COPPER IN TURKEY.** *Min. & Sci. Press*, vol. 98, p. 824. 1 column.
- THE COPPER VEINS OF THE SOUTH.** By O. M. Lieber. *Min. Mag.*, vol. 7, p. 367. 4 pages.
- COPPER DEPOSITS IN THE WESTERN FOOTHILLS OF THE SIERRA NEVADA.** By W. Forestner. *Min. & Sci. Press*, vol. 96, p. 743. 10½ columns. I.
- THE UTAH COPPER MINE.** By C. De Kalb. *Min. & Sci. Press*, vol. 98, p. 516. 9½ columns. I.
- OPERATIONS OF THE UTAH COPPER COMPANY DURING 1908.** By D. C. Jackling. *E. & M. J.*, vol. 87, p. 1185. 11½ columns. I.
- THE SOUTH UTAH MINE AND MILL.** By L. Palmer. *M. & M.*, vol. 31, p. 592. 8½ columns. I.
- THE BOSTON CONSOLIDATED MINING COMPANY, UTAH.** *E. & M. J.*, vol. 85, p. 257. 3 columns.

- BOSTON CONSOLIDATED, BINGHAM, UTAH.** By C. De Kalb. *Min. & Sci. Press*, vol. 98, p. 553. 7 columns. I.
- ORE OCCURRENCE AT FORTUNA MINE, BINGHAM, UTAH.** By E. R. Zalin-ski. *E. & M. J.*, vol. 86, p. 1191. 14 columns. I.
- CHARACTER OF THE CUBAN COPPER MINES.** *J. C. M. I.*, vol. 13, p. 97. 2½ pages.
- "TWO CUBAN MINES": Copper.** By B. B. Lawrence. *J. C. M. I.*, vol. 13, p. 91. 18 pages. I.
- EL COBRE COPPER MINE.** By B. B. Lawrence. *M. & M.*, vol. 31, p. 235. 10½ columns. I.
- EL COBRE MINES, CUBA.** By E. G. Tuttle. *M. & M.*, vol. 31, p. 449. 11 columns. I.
- COPPER ORES IN PORTO RICO.** *E. & M. J.*, vol. 88, p. 518. ¼ column.
- A SKETCH OF THE MINES AND COPPER REGION OF SOUTHWESTERN VIRGINIA.** By W. J. Marsh. *Min. Mag.*, vol. 9, p. 217. 3½ pages.
- COPPER IN SOUTHWESTERN WISCONSIN.** By G. H. Cox. *Min. & Sci. Press*, vol. 99, p. 592. 1½ columns. I.
- COPPER DEPOSITS OF THE HARTVILLE UPLIFT, WYOMING.** By S. H. Ball. *U. S. G. S., Bull.* 315, p. 93. 14 pages. 1906.
- LAKE CREEK, WYOMING, A NEW MINING DISTRICT.** By W. Benton. *E. & M. J.*, vol. 86, p. 36. 1 column.
- See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.**
- See also **THE COPPER TRADE.**
- Occurrence of Diamonds**
- DIAMOND-CARBON IN METEORITES.** *Min. & Sci. Press*, vol. 95, p. 310. ½ columns.
- CARBONS: The Black Diamond.** By J. Baszanger. *Min. & Sci. Press*, vol. 95, p. 788. ½ column.
- THE DIAMOND INDUSTRY IN SOUTH AFRICA.** *E. & M. J.*, vol. 85, p. 1106. ½ column.
- SOUTH AFRICAN DIAMOND MINES.** *E. & M. J.*, vol. 87, p. 1240. 1½ columns.
- DIAMOND MINING AT DE BEERS.** *P. C. M. & M. Soc. S. A.*, vol. 7, p. 227. 4½ columns.
- THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHOFF DISTRICT, SOUTH AFRICA.** By J. P. Johnson. *T. I. M. & M.*, vol. 17, p. 277. 8 pages.
- VISIT TO PREMIER DIAMOND MINE.** *P. C. M. & M. Soc. S. A.*, vol. 9, p. 209. 5½ columns. I.
- PREMIER DIAMOND MINE, NEAR PRETORIA, TRANSVAAL.** By E. M. Weston. *E. & M. J.*, vol. 89, p. 369. 10½ columns. I.
- DIAMOND MINES AND ALLUVIAL DEPOSITS, SOUTH AFRICA: The Method Employed in Winning Diamonds on the Vaal River Alluvial Fields.** By P. R. Day. *T. Au. I. M. E.*, vol. 6, p. 87. 6 pages. I.
- ALLUVIAL DIAMOND MINING, SOUTH AFRICA.** By P. B. Holte. *M. & M.*, vol. 29, p. 37. 2 columns. I.
- DIAMONDS IN ARKANSAS.** By G. F. Kunz and H. S. Washington. *T. A. I. M. E.*, vol. 39, p. 169. 7 pages.
- SOME FACTS AND CORRECTIONS REGARDING THE DIAMOND REGION OF ARKANSAS.** By J. C. Branner. *E. & M. J.*, vol. 87, p. 371. 4 columns.
- PRODUCTION OF DIAMONDS FROM THE ARKANSAS FIELD.** *E. & M. J.*, vol. 87, p. 155. 1½ columns.
- THE ARKANSAS DIAMOND FIELDS.** By O. Q. Millar. *Min. & Sci. Press*, vol. 99, p. 534. 1½ columns.
- THE ARKANSAS DIAMOND FIELDS IN 1909.** By J. F. Fuller. *E. & M. J.*, vol. 89, p. 767. 4 columns. I.
- DIAMOND MINES OF ARKANSAS.** By J. L. Cowan. *Min. & Sci. Press*, vol. 101, p. 178. 4 columns. I.
- DIAMOND MINE IN PIKE COUNTY, ARKANSAS.** By J. T. Fuller. *E. & M. J.*, vol. 87, p. 152. 10½ columns. I.

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SPECULATION ON THE ORIGIN AND FORMATION OF THE DIAMOND, WITH ESPECIAL REFERENCE TO ITS FORMATION AND POSITION AT BINGARA, NEW SOUTH WALES. By T. Mercer. T. Au. I. M. E., vol. 3, p. 56. 14½ pages.

DOES AN AUSTRALIAN KIMBERLEY EXIST? By J. Plummer. Min. & Sci. Press, vol. 99, p. 93. 2½ columns.

PROSPECTING FOR "BLACK DIAMONDS." By A. S. Atkinson. M. & M., vol. 30, p. 644. 2½ columns.

MINERAL RESOURCES OF THE BAHIA HIGHLANDS, BRAZIL. E. & M. J., vol. 87, p. 1029. 12½ columns. I.

BRAZILIAN DIAMONDS. Min. & Sci. Press, vol. 95, p. 24. 1 column.

OCCURRENCE OF THE DIAMONDS OF BAHIA, BRAZIL. E. & M. J., vol. 87, p. 984. 5 columns. I.

THE DIAMOND BEARING HIGHLANDS OF BAHIA, BRAZIL. By J. C. Branner. E. & M. J., vol. 87, p. 981, 17½ columns, I.; p. 1029, 12½ columns, I.

BRAZILIAN DIAMOND MINING. E. & M. J., vol. 85, p. 442. 1 column.

THE DIAMANTINA DISTRICT OF MINAS GERES. By G. W. Lindsay. E. & M. J., vol. 87, p. 856. 2 columns.

MINING FOR GEMS IN BRAZIL. By A. S. Atkinson. E. & M. J., vol. 87, p. 1234. 5 columns.

DIAMONDS IN CALIFORNIA. By H. G. Hanks. Min. & Sci. Press, vol. 20, p. 162, 2½ columns; p. 194, 1 column; vol. 22, p. 140, 1½ columns.

SEARCH FOR DIAMONDS ON THE PACIFIC COAST. Min. & Sci. Press, vol. 22, p. 358. 1 column.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.

Diatomaceous Earths

GERMAN DIATOMACEOUS EARTH. E. & M. J., vol. 87, p. 938. ¾ column.

DIATOMACEOUS DEPOSITS OF NORTHERN SANTA BARBARA COUNTY, CALI-

FORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 315, p. 438. 10 pages. 1906.

Fuller's Earth Deposits

PROPERTIES AND TESTS OF FULLER'S EARTH. By J. T. Porter. U. S. G. S., Bull. 315, p. 268. 22½ pages. 1906.

FULLER'S EARTH. P. C. M. & M. Soc. S. A., vol. 9, p. 276. 1½ columns.

FULLER'S EARTH. M. & M., vol. 29, p. 54. 1½ columns. I.

FULLER'S EARTH. E. & M. J., vol. 87, p. 1000. 2 columns.

FULLER'S EARTH, KAOLIN AND PEAT IN FLORIDA. By E. H. Sellards. E. & M. J., vol. 85, p. 1187. 1 column.

FULLER'S EARTH OF SOUTHWESTERN GEORGIA AND WESTERN FLORIDA. By T. W. Vaughan. U. S. G. S., Mineral Resources, 1901. 13 pages.

Occurrence of Feldspar

ECONOMIC GEOLOGY OF THE FELDSPAR DEPOSITS OF THE UNITED STATES. By E. S. Bastin. U. S. G. S., Bull. 420. 85 pages. I. 1910.

FELDSPAR AND QUARTZ DEPOSITS OF MAINE. By E. S. Bastin. U. S. G. S., Bull. 315, p. 383. 10½ pages. 1906.

Occurrence of Fluorspar

FLUORSPAR GRADES AND MARKETS. By F. J. Fohs. Min. & Sci. Press, vol. 99, p. 720. 3½ columns.

FLUORSPAR. By F. J. Fohs. Min. & Sci. Press, vol. 98, p. 888. 5 columns.

FLUORSPAR IN COLORADO. By E. F. Burchard. Min. & Sci. Press, vol. 99, p. 258. 6½ columns. Map.

KENTUCKY FLUORSPAR AND ITS VALUE TO THE IRON AND STEEL INDUSTRIES. By F. J. Fohs. T. A. I. M. E., vol. 40, p. 261. 13 pages.

Occurrence of Glass Sands

NOTES ON VARIOUS GLASS SANDS, MAINLY UNDEVELOPED. By E. F. Burchard. U. S. G. S., Bull. 315, p. 377. 6 pages. 1906.

THE REQUIREMENTS OF SAND AND LIMESTONE FOR GLASS MAKING. By E. F. Burchard. U. S. G. S., Bull. 285, p. 452. 7 pages. 1905.

GLASS-SAND INDUSTRY OF INDIANA, KENTUCKY, AND OHIO. By E. F. Burchard. U. S. G. S., Bull. 315, p. 361. 16 pages. 1906.

GLASS SAND OF THE MIDDLE MISSISSIPPI BASIN. By E. F. Burchard. U. S. G. S., Bull. 285, p. 459. 14 pages. 1905.

THE GLASS-SAND INDUSTRY IN EASTERN WEST VIRGINIA. By G. W. Stose. U. S. G. S., Bull. 285, p. 473. 3 pages. 1905.

See also GLASS MAKING.

The Occurrence of Gold

THE PRESENCE OF GOLD AND SILVER IN DEEP-SEA DREDGINGS. T. A. I. M. E., vol. 38, p. 704. 1 page.

THE GREAT GOLD MINES. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 10, 7½ columns, I.; p. 161, 5½ columns, I.

LODES AND QUARTZ VEINS OF GOLD. By A. Waddington. Min. Mag., vol. 2, p. 21. 3 pages.

THE ANATOPUR GOLDFIELD. Min. Mag., London, vol. 2, p. 42. 1½ columns. I.

SOME NOTES ON BANKET DEPOSITS, WITH SPECIAL REFERENCE TO THOSE MET WITH AT THE DENNY-DALTON GOLDFIELDS, VRYHIED DISTRICT, SOUTH AFRICAN REPUBLIC, AND THE PROCESS OF TREATMENT EMPLOYED THERE. By G. A. Denny. T. A. I. M. E., vol. 3, p. 75. 16 pages. I.

THE CROWN MINES, LIMITED. M. & M., vol. 31, p. 691. 2½ columns.

CONSOLIDATED GOLD FIELDS OF SOUTH AFRICA, LTD. By E. M. Weston.

E. & M. J., vol. 85, p. 355. 3½ columns. I.

THE ROBINSON MINE, SOUTH AFRICA. By J. B. Pritchford. Min. & Sci. Press, vol. 97, p. 606. 5 columns.

PRESENT MINING CONDITIONS ON THE RAND: Discussion of the paper of Thomas H. Leggett, p. 211. T. A. I. M. E., vol. 39, p. 856. 2½ pages.

NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 8, p. 255, 23 columns, I.; p. 305, 1 column; p. 346, 12½ columns; p. 381, 3 columns; vol. 9, p. 13, 15 columns, I.; p. 48, 1 column; p. 82, 24 columns, I.

THE GREAT MINES OF THE RAND. By T. A. Rickard. Min. Mag., London, vol. 2, p. 213. 7½ columns. I.

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E., vol. 39, p. 211. 12½ pages.

REMINISCENCES OF THE EARLY RAND. By M. H. Coombe. P. C. M. & M. Soc. S. A., vol. 9, p. 38, 7½ columns; p. 123, 5 columns; p. 204, 4 columns; p. 227, 10 columns, I.; p. 272, 5 columns.

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. E. & M. J., vol. 85, p. 1239. 10 columns.

FURTHER NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 276, 11½ columns, I.; p. 319, 1½ columns; p. 449, 6 columns; p. 394, 8½ columns, I.

REMINISCENCES OF THE EARLY RAND. By J. S. MacArthur. E. & M. J., vol. 88, p. 357. 4½ columns.

MINING CONDITIONS ON THE RAND. By T. H. Leggett. Min. & Sci. Press, vol. 96, p. 812. 9½ columns. I.

THE PRINCIPAL MINES OF THE TRANSVAAL. Min. & Sci. Press, vol. 96, p. 10. 2 columns. Table.

- THE PILGRIM'S REST GOLD FIELDS AND MINING METHODS.** By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 9, p. 293, 16 columns, I.; p. 349, 3½ columns; p. 395, 2 columns, I.
- VISITING THE GOLD COAST, WEST AFRICA.** By F. F. Sharpless. Min. & Sci. Press, vol. 101, p. 800. 7 columns. Map.
- A WEST AFRICAN GOLD MINE.** E. & M. J., vol. 87, p. 1005. 1½ columns.
- THE WEST AFRICAN, GOLDFIELD.** E. & M. J., vol. 87, p. 905. 1 column.
- WEST AFRICA, THE GOLD COAST COLONY, AND ASHANTI IN 1908.** By W. F. Wilkinson. E. & M. J., vol. 87, p. 196. 3½ columns.
- EARLY DAYS ON THE GOLD COAST.** By E. T. McCarthy. Min. Mag., London, vol. 1, p. 291. 6½ columns.
- WEST AFRICAN MINES.** By J. H. Curle. Min. Mag., London, vol. 1, p. 42. 6 columns. I.
- GOLD MINING IN WEST AFRICA.** E. & M. J., vol. 85, p. 1282. 1 column.
- THE BARBERTON GOLDFIELD IN SWAZILAND.** E. & M. J., vol. 89, p. 669. 2½ columns.
- THE BARBERTON GOLDFIELD, SOUTH AFRICA.** By A. Richardson. P. C. M. & M. Soc. S. A., vol. 10, p. 122. 25 columns.
- NOTES ON THE GOLD OF THE ROODEPOORT DISTRICT.** By G. Andreoli. P. C. M. & M. Soc. S. A., vol. 5, p. 73, 4 columns; p. 152, 1 column.
- MINING IN SOUTHERN RHODESIA.** By A. H. Ackermann. Min. Mag., London, vol. 2, p. 138. 6 columns. I.
- SMALL MINES OF RHODESIA.** By B. I. Collings. P. C. M. & M. Soc. S. A., vol. 9, p. 76, 10 columns; p. 126, 3½ columns; p. 166, 2½ columns; p. 206, 2 columns; p. 275, 1½ columns.
- STAR OF THE CONGO MINE.** Min. & Sci. Press, vol. 100, p. 260. ½ column. I.
- MINING CONDITIONS IN THE BELGIAN CONGO (CONGO FREE STATE).** By S. H. Ball and M. K. Shaler. T. A. I. M. E., vol. 41, p. 189. 9 pages. I.
- THE NEW GOCH GOLD MINES, LTD.** P. C. M. & M. Soc. S. A., vol. 5, p. 57. 10 columns.
- NOTES ON SOME GOLD DEPOSITS OF ALABAMA.** By H. D. McCaskey. U. S. G. S., Bull. 340, p. 36. 17 pages. 1907.
- SOME ECONOMIC GOLD DEPOSITS OF ALASKA.** By F. C. Lincoln. E. & M. J., vol. 90, p. 551. 11 columns.
- GOLD MINING IN ALASKA.** By A. H. Brooks. E. & M. J., vol. 85, p. 311. 3 columns.
- AURIFEROUS QUARTZ VEINS IN THE FAIRBANKS DISTRICT, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 442, p. 210. 20 pages. I. 1909.
- AURIFEROUS QUARTZ VEINS ON UNALASKA ISLAND.** By A. J. Collier. U. S. G. S., Bull. 259, p. 102. 2 pages.
- GOLD DEPOSITS OF THE SHUMAGIN ISLANDS.** By G. C. Martin. U. S. G. S., Bull. 259, p. 100. 2 pages.
- OCCURRENCE OF GOLD IN TREADWELL ORE DEPOSITS.** U. S. G. S., Bull. 259, p. 82. ½ page.
- THE ALASKA-TREADWELL MINES.** Min. Mag., London, vol. 2, p. 142, 2 columns, I.; vol. 3, p. 278, 4 columns, I.
- THE TREADWELL ORE DEPOSITS.** Min. & Sci. Press, vol. 95, p. 117. 6½ columns. I.
- THE TREADWELL GROUP OF MINES.** By A. C. Spencer. Min. & Sci. Press, vol. 95, p. 117. 6½ columns. I.
- THE JUNEAU GOLD BELT, ALASKA.** By A. C. Spencer. U. S. G. S., Bull. 287. 161 pages. I. 1906.
- LODE MINING IN SOUTHEASTERN ALASKA, 1907.** By C. W. Wright. U. S. G. S., Bull. 345, p. 78. 20 pages. I. 1907.

- LODE MINING IN SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 314, p. 47. 28 pages. I. 1906.
- YAKUTAT BAY REGION. Min. & Sci. Press, vol. 99, p. 719. 1 column.
- MINING ON PRINCE OF WALES ISLAND, ALASKA. By W. A. Scott. Min. & Sci. Press, vol. 98, p. 885. 3½ columns. I.
- MINING AT SHUNGNAK, ALASKA. By L. Lloyd. Min. & Sci. Press, vol. 101, p. 109. 2 columns. I.
- THE KOYNKUK-CHANDLAR GOLD REGION, ALASKA. By A. G. Maddren. U. S. G. S., Bull. 442, p. 284. 32 pages. I. 1909.
- GOLD OF PRINCE WILLIAM SOUND. By U. S. Grant. U. S. G. S., Bull. 379, p. 97. 1 page. 1908.
- GOLD FIELDS OF THE SOLOMON AND NINKLUK RIVER BASINS. By P. S. Smith. U. S. G. S., Bull. 314, p. 146. 11 pages. 1906.
- OCCURRENCE OF GOLD IN THE YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 345, p. 179. 10 pages. I. 1907.
- PLACER GOLD DEPOSITS OF ALASKA. E. & M. J., vol. 90, p. 551. 6 columns.
- NEW PLACERS IN ALASKA. Min. & Sci. Press, vol. 97, p. 842. 2 columns. Map.
- RAMPART PLACER REGION. By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 259, p. 104. 15 pages.
- THE RAMPART PLACERS, YUKON-TANANA REGION, ALASKA. By F. L. Hess. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- THE RAMPART GOLD PLACER REGION ALASKA. By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 280. 54 pages. I. 1906.
- THE GOLD PLACERS OF THE FORTY-MILE, BIRCH CREEK, AND FAIRBANKS REGIONS, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 251. 89 pages. I. 1905.
- THE FORTY-MILE GOLD-PLACER DISTRICT, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 345, p. 187. 12 pages. 1907.
- THE INNOKO GOLD-PLACER DISTRICT, ALASKA, WITH ACCOUNTS OF THE CENTRAL KUSKOKWIN VALLEY AND THE RUBY CREEK AND GOLD HILL PLACERS. By A. G. Maddren. U. S. G. S., Bull. 410. 87 pages. I. 1910.
- GOLD PLACERS OF THE INNOKO DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 238. 29 pages. 1908.
- PRELIMINARY REPORT ON THE CAPE NOME GOLD REGION, ALASKA. By F. C. Schrader, and A. H. Brooks. U. S. G. S., Special Publications, 1900. 56 pages. I.
- THE NOME REGION, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 314, p. 126. 18 pages. I. 1906.
- THE GOLD PLACERS OF TURNAGAIN ARM. By F. H. Moffitt. U. S. G. S., Bull. 259, p. 90. 9 pages. I.
- THE CAPE YAKTAZ PLACERS. By G. C. Martin. U. S. G. S., Bull. 259, p. 88. 2 pages.
- THE IRON CREEK REGION. By P. S. Smith. U. S. G. S., Bull. 379, p. 302. 53 pages. I. 1908.
- PLACERS OF THE GOLD HILL DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 234. 3 pages. 1908.
- GOLD PLACERS OF THE RUBY CREEK DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 229. 5 pages. I. 1908.
- THE GOLD PLACERS OF PARTS OF SEWARD PENINSULA, ALASKA, INCLUDING THE NOME, COUNCIL, KOUGAROK, PORT CLARENCE, AND GOODHOPE PRECINCTS. By A. J. Collier. U. S. G. S., Bull. 328. 343 pages. I. 1908.
- THE FAIRBANKS GOLD PLACER REGION. By L. M. Prindle and F. J. Katz. U. S. G. S., Bull. 379, p. 181. 20 pages. I. 1908.

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- YUKON GOLD.** By O. B. Perry. Min. & Sci. Press, vol. 96, p. 556. 3 columns.
- THE PORCUPINE PLACER DISTRICT, ALASKA.** By C. W. Wright. U. S. G. S., Bull. 236. 35 pages. I. 1904.
- THE FAIRHAVEN GOLD PLACERS OF THE SEWARD PENINSULA, ALASKA.** By F. H. Moffit. U. S. G. S., Bull. 247. 85 pages. I. 1905.
- GOLD PLACERS OF THE MULCHATNA, ALASKA.** By F. J. Katz. U. S. G. S., Bull. 442, p. 201. 1½ pages. 1909.
- PELLY, ROSS AND GRAVEL RIVERS.** By J. Keele. Min. & Sci. Press, vol. 99, p. 66. 2 columns.
- HAINES DISTRICT, ALASKA.** By W. A. Scott. Min. & Sci. Press, vol. 99, p. 198. 2½ columns. I.
- PLACERS OF TIERRA DEL FUEGO.** By S. H. Loram. Min. & Sci. Press, vol. 99, p. 125. 6½ columns.
- THE OCTAVE MINE, ARIZONA.** By J. E. Russell. E. & M. J., vol. 85, p. 211. 1½ columns. I.
- THE GOLD ROAD MINE, ARIZONA.** By J. C. Kennedy. Min. & Sci. Press, vol. 101, p. 773. 1½ columns.
- NOTES ON THE PLACER DEPOSITS OF GREATERVILLE, ARIZONA.** By J. M. Hill. U. S. G. S., Bull. 430, p. 11. 12 pages. I. 1909.
- THE MOUNT MORGAN GOLD AND COPPER MINE.** By G. W. Williams. E. & M. J., vol. 87, p. 635. 12½ columns. I.
- OCCURRENCE OF ORE IN MOUNT MORGAN MINE.** E. & M. J., vol. 87, p. 747. 1 column.
- THE MOUNT MORGAN MINE, CENTRAL QUEENSLAND.** By J. B. Wilson. E. & M. J., vol. 87, p. 746. 19 columns. I.
- NATURE OF THE MOUNT MORGAN ORE DEPOSITS.** E. & M. J., vol. 87, p. 635. 1½ columns.
- THE MOUNT MORGAN MINE.** By O. M. Colvocoresses. M. & M., vol. 29, p. 3. 4½ columns. I.
- THE MOUNT MORGAN MINE.** Min. & Sci. Press, vol. 95, p. 524. 3 columns. I.
- TELLURIUM IN THE ORES OF THE HAURAKI GOLDFIELDS, NEW ZEALAND.** By F. B. Allen. T. Au. I. M. E., vol. 7, p. 94. 4 pages.
- THE SYNCLINAL OR "INVERTED SADDLE" REEFS OF THE BENDIGO GOLDFIELD.** By W. H. Cundy. T. Au. I. M. E., vol. 8, pt. 2, p. 278. 10 pages. I.
- NOTES ON THE LEFROY GOLDFIELDS.** By L. Jolly. T. Au. I. M. E., vol. 4, p. 132. 6 pages.
- MINING ON PRIVATE PROPERTY ON THE GOLDFIELDS OF WESTERN AUSTRALIA.** By E. Lidgey. T. Au. I. M. E., vol. 8, pt. 1, p. 1. 10 pages. I.
- THE GOLD FIELDS OF VICTORIA.** Min. & Sci. Press, vol. 20, p. 120, 1 column; p. 130, 1½ columns; p. 234, 2 columns; p. 266, 1 column.
- NOTES ON THE GEOLOGY, QUARTZ REEFS AND MINERALS OF THE WAIHI GOLDFIELD, NEW SOUTH WALES, AUSTRALIA.** By P. C. Morgan. T. Au. I. M. E., vol. 8, pt. 2, p. 164. 23½ pages. I.
- GOLD IN SALT LAKES IN WESTERN AUSTRALIA.** T. Au. I. M. E., vol. 8, pt. 1, p. 32. 1 page.
- NOTES ON THE AURIFEROUS DEVONIAN FORMATIONS OF GIPPSLAND, VICTORIA.** By H. Herman. T. Au. I. M. E., vol. 5, p. 157. 12 pages. Maps.
- A FEW NOTES AND OBSERVATIONS ON THE REDUCTION AND ORE-DRESSING OF AURIFEROUS QUARTZ VEINSTONE IN VICTORIA.** By H. Rosales. T. Au. I. M. E., vol. 5, p. 81. 12 pages. Tables.
- AURIFEROUS VEINS AT CHARTERS TOWERS, AUSTRALIA.** By W. J. Paull. T. Au. I. M. E., vol. 3, p. 243. 6 pages.

- SOME GOLD-BEARING ROCKS AT BINGARA, NEW SOUTH WALES.** By C. C. H. Mole. *T. Au. I. M. E.*, vol. 2, p. 114. 2½ pages.
- PHYSIOGRAPHY AND GEOLOGY OF THE WADNAMINGA GOLDFIELDS, SOUTH AUSTRALIA.** By F. D. Johnson. *T. Au. I. M. E.*, vol. 2, p. 58. 10 pages. I.
- GOLD DEPOSITS OF COTHY, SOUTH WALES.** By B. W. Holman. *Min. Mag.*, vol. 4, p. 374. 8½ columns. I.
- LEADING PRODUCERS OF KALGOORLIE, WEST AUSTRALIA.** By G. W. Williams. *E. & M. J.*, vol. 85, p. 403. 3½ columns.
- IMPRESSIONS OF THE COUNTRY BETWEEN COOLGARDI AND McDONNELL RANGES.** By H. V. Smith. *T. Au. I. M. E.*, vol. 8, pt. 1, p. 68. 4½ pages.
- THE DISCOVERY AND OCCURRENCE OF TELLURIDE OF GOLD UPON THE KALGOORLIE GOLDFIELDS, EAST COOLGARDI DISTRICT, WESTERN AUSTRALIA.** By A. G. Holroyd. *T. Au. I. M. E.*, vol. 4, p. 186. 8 pages.
- ALLUVIAL DEPOSITS IN WESTERN AUSTRALIA.** *T. Au. I. M. E.*, vol. 13, p. 182. 2 pages.
- DEEP LEAD MINING IN AUSTRALIA.** By D. H. Browne. *Min. & Sci. Press*, vol. 97, p. 565. 9½ columns. I.
- DEEP LEADS OF VICTORIA: The Cainozoic Buried Auriferous River Deposits.** By H. L. Wilkinson. *T. I. M. & M.*, vol. 17, p. 210. 58 pages. I.
- GOLD NUGGETS OF VICTORIA.** *T. Au. I. M. E.*, vol. 2, p. 23. 1 page.
- THE BOICZA GOLD MINES IN HUNGARY.** By N. B. Knox. *Min. & Sci. Press*, vol. 100, p. 31. 8 columns. I.
- THE GOLD ALLUVIALS OF THE RIVER DRAU IN HUNGARY.** By A. Von Gernet. *T. I. M. & M.*, vol. 17, p. 439. 4 pages.
- THE VERESPATAK-ABRUDBANYA (GOLD) DISTRICT, HUNGARY.** By G. Slujka. *E. & M. J.*, vol. 85, p. 154. 1½ columns.
- GOLD DEPOSITS IN BOLIVIA.** *M. & M.*, vol. 30, p. 379. 1 column. Map.
- THROUGH THE BOLIVIAN HIGHLANDS.** By E. P. Mathewson. *Min. & Sci. Press*, vol. 97, p. 227, 4 columns; p. 263, 8½ columns. I.
- SUCHEZ DE BOLIVIA HYDRAULIC MINE.** By W. E. G. Firebrace. *Min. & Sci. Press*, vol. 98, p. 287. 3 columns. I.
- AURIFEROUS ALLUVIALS OF THE UPPER AMAZON VALLEY.** By Sir W. M. Conway. *E. & M. J.*, vol. 87, p. 496. 2 columns.
- THE CENTRE STAR GROUP OF MINES, ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen. *E. & M. J.*, vol. 89, p. 17. 8½ columns. I.
- LE ROI MINE AT ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen. *E. & M. J.*, vol. 89, p. 220. 4 columns. I.
- BEAR RIVER DISTRICT, BRITISH COLUMBIA.** By W. W. Rush. *Min. & Sci. Press*, vol. 99, p. 152. 2 columns. Map.
- THE PORTLAND CANAL MINING DISTRICT, BRITISH COLUMBIA.** *E. & M. J.*, vol. 90, p. 451. 3 columns. I.
- CALIFORNIA GOLD MINING.** *Min. & Sci. Press*, vol. 100, p. 17. 3 columns. I.
- MINERAL PROSPECTS AROUND DEATH VALLEY.** By R. E. Rinehart. *Min. & Sci. Press*, vol. 97, p. 297. 4½ columns. I.
- MINERAL DISTRICT OF CENTRAL CALIFORNIA.** By J. B. Trask. *Min. Mag.*, vol. 3, p. 121, 15 pages; p. 239, 12 pages.
- MINES AND MINING IN CALIFORNIA: Placer Mining.** *Min. Mag.*, vol. 5, p. 193. 23 pages.
- QUARTZ MINING OPERATIONS IN CALIFORNIA.** *Min. Mag.*, vol. 1, p. 144. 5½ pages.

- EXPERIENCE OF THE GOLD MINES OF CALIFORNIA.** Min. Mag., vol. 8, p. 28, 12 pages; p. 129, 8½ pages; p. 222, 6 pages; p. 477, 10 pages.
- THE NEW GOLD FIELD IN SAN DIEGO COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 20, p. 200. 1 column.
- MINING ON THE MOTHER LODE IN AMADOR COUNTY, CALIFORNIA.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 897. 6 columns.
- THE EXPOSED TREASURE LODE, MOJAVE, CALIFORNIA.** By C. De Kalb. T. A. I. M. E., vol. 38, p. 310. 10 pages. I.
- THE STANDARD MINE, BODIE, CALIFORNIA.** By R. G. Brown. T. A. I. M. E., vol. 38, p. 343. 15 pages. I.
- OBSERVATIONS ON THE EXTENT OF THE GOLD REGION OF CALIFORNIA AND OREGON.** By W. P. Blake. Min. Mag., vol. 5, p. 32. 14 pages.
- HART: A New California Gold Camp.** E. & M. J., vol. 85, p. 308. ¼ column.
- GOLD PARK DISTRICT, CALIFORNIA.** E. & M. J., vol. 90, p. 600. 2 columns. I.
- BLACK DIAMOND, CALIFORNIA.** By O. H. Hershey. Min. & Sci. Press, vol. 98, p. 147. 1½ columns.
- GOLD MINING IN RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. Min. & Sci. Press, vol. 101, p. 508. 4 columns; p. 533, 8 columns, I.
- GOLD MINING IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 430, p. 23. 24 pages. 1909.
- HOAG DISTRICT, CALIFORNIA.** By N. C. Stines. Min. & Sci. Press, vol. 100, p. 384. 5½ columns. I.
- KEYSTONE CONSOLIDATED MINE AND ITS EARLY HISTORY.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 755. 4 columns. I.
- MINING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Walcott. E. & M. J., vol. 87, p. 396. 6½ columns. I.
- MINING AT ALLEGHANY, CALIFORNIA.** By F. L. Lowell. Min. & Sci. Press, vol. 100, p. 132. 3 columns. I.
- SOME ORE DEPOSITS IN THE INYO RANGE, CALIFORNIA.** By J. A. Reid. Min. & Sci. Press, vol. 95, p. 80. 4½ columns. I.
- GOLD MINES NEAR THE CALAVERAS BIG TREES.** Min. & Sci. Press, vol. 22, p. 361. 1 column.
- THE WEAVERVILLE-TRINITY CENTER GOLD GRAVELS, TRINITY COUNTY, CALIFORNIA.** By D. F. MacDonald. U. S. G. S., Bull. 430, p. 48. 11 pages. I. 1909.
- SANTA CLARA RIVER PLACERS.** By C. E. Jamison. Min. & Sci. Press, vol. 100, p. 360. 2½ columns.
- LA GRANGE HYDRAULIC MINE, CALIFORNIA.** By D. F. Campbell. Min. & Sci. Press, vol. 97, p. 491. 6 columns. I.
- GOLD AREAS IN THE CANADIAN NORTH-WEST.** E. & M. J., vol. 90, p. 548. 4 columns.
- GOLD IN THE EASTERN TOWNSHIPS OF THE PROVINCE OF QUEBEC.** By J. Obalski. J. C. M. I., vol. 11, p. 251. 6 pages. I. Map.
- THE LARDER LAKE DISTRICT, ONTARIO.** E. & M. J., vol. 85, p. 258. 2 columns.
- THE NICKEL PLATE MINE AND MILL.** Min. & Sci. Press, vol. 101, p. 271. 4 columns. I.
- RECENT MINING DEVELOPMENTS ON THE SKEENA RIVER, CANADA.** By W. W. Leach. J. C. M. I., vol. 13, p. 357. 6 pages.
- THE OPASATIKA LAKE DISTRICT, PROVINCE OF QUEBEC.** By F. Cirkel. E. & M. J., vol. 87, p. 455. 3 columns. I.
- THE NEW GOLDFIELDS OF PORCUPINE, ONTARIO.** By R. E. Hore. E. & M. J., vol. 90, p. 1296. 3½ columns. I.

- THE PORCUPINE DISTRICT, ONTARIO. By R. W. Brock. E. & M. J., vol. 90, p. 221. 3 columns.
- THE PORCUPINE GOLDFIELD. By A. L. SIMON. Min. Mag., London, vol. 3, p. 348. 6 columns. I.
- PORCUPINE, THE NEW GOLD REGION OF THE FAR NORTH. Min. & Sci. Press, vol. 101, p. 705. 3½ columns.
- PORCUPINE DISTRICT OF ONTARIO. By W. G. Miller. Min. & Sci. Press, vol. 101, p. 232. 2 columns. Map.
- PORCUPINE LAKE REGION, ONTARIO. E. & M. J., vol. 89, p. 209. 3½ columns. Map.
- THE PORCUPINE GOLDFIELD. By W. J. Loring. Min. Mag., vol. 4, p. 284. 8 columns. I.
- THE PORCUPINE GOLD FIELD. By R. A. Meyer. M. & M., vol. 31, p. 701. 4½ columns. Map.
- A BRIEF DESCRIPTION OF THE GOWGANDA SILVER DISTRICT IN ONTARIO, CANADA. By P. R. Ireman. Sch. Mines Quart., vol. 31, p. 172. 4½ pages. I.
- FIRST YEAR OF THE GOWGANDA DISTRICT, ONTARIO. By G. M. Colvocoresses. E. & M. J., vol. 89, p. 1218. 9½ columns. I.
- THE GOWGANDA REGION IN ONTARIO. E. & M. J., vol. 88, p. 60. 5 columns.
- IMPRESSIONS OF A NEW CAMP: Gowganda. By H. E. West. E. & M. J., vol. 87, p. 900. 7 columns.
- NOTES ON THE RAINY RIVER DISTRICT, ONTARIO. By W. L. Fleming. E. & M. J., vol. 88, p. 1064. 6½ columns. I.
- THE EASTERN CANADIAN MINERAL BELT. By T. F. Van Wagenen. Min. & Sci. Press, vol. 101, p. 372. 5½ columns. Map.
- MONTREAL RIVER DISTRICT, CANADA. By W. H. Collins. Min. & Sci. Press, vol. 98, p. 895. 2 columns.
- THE PROGRESS OF GOLD MINING IN NORTH CAROLINA. By E. W. Lyon. E. & M. J., vol. 87, p. 293. 13½ columns. I.
- ORE DEPOSITS OF THE EASTERN GOLD-BELT OF NORTH CAROLINA. By W. O. Crosby. T. A. I. M. E., vol. 38, p. 849. 9 pages.
- NOTES ON THE GOLD REGIONS OF NORTH AND SOUTH CAROLINA. By S. P. Leeds. Min. Mag., vol. 2, p. 27, 6 pages; p. 357, 12 pages, I.
- MINES AND MILL OF MONTEZUMA MINES, COSTA RICA. By S. F. Shaw. E. & M. J., vol. 90, p. 715. 6 columns. I.
- GOLD REGION OF THE STRAIT OF MAGELLAN. By R. A. T. Penrose. Min. & Sci. Press, vol. 98, p. 153. 3½ columns.
- THE GOLD DEPOSITS OF FRENCH GUIANA. E. & M. J., vol. 87, p. 400. 2½ columns. I.
- THE GOLD-FIELDS OF FRENCH GUIANA AND THE NEW METHOD OF DREDGING. By A. F. J. Bordeaux. T. A. I. M. E., vol. 41, p. 567. 28 pages. I.
- GOLD-BEARING GRAVELS IN FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 575. 10 pages.
- GOLD MINES OF TIBET. By A. Del Mar. Min. & Sci. Press, vol. 100, p. 254. 3½ columns.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 217. 12½ columns. I.
- PASTO GOLD DISTRICT, COLOMBIA. Min. & Sci. Press, vol. 100, p. 583. 2 columns. I.
- QUARTZ MINES IN COLOMBIA, SOUTH AMERICA. By F. F. Sharpless. Min. & Sci. Press, vol. 97, p. 422. 4½ columns. I.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. Mag., London, vol. 2, p. 369. 15½ columns. I.
- THE FUTURE GOLD OUTPUT OF COLOMBIA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- ALLUVIAL GOLD DEPOSITS AND MINING IN COLOMBIA. By P. A. Alig.

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- E. & M. J., vol. 90, p. 1098. 4 columns.
- COLOMBIAN GOLD PLACERS. T. A. I. M. E., vol. 39, p. 418. 1 page. Table.
- PRIMARY GOLD IN COLORADO GRANITE. By J. B. Hastings. T. A. I. M. E., vol. 39, p. 97. 6 pages. I.
- LESSONS FROM GILPIN COUNTY PRACTICE. By G. E. Collins. Min. & Sci. Press, vol. 101, p. 366. 11½ columns.
- THE ALICE MINE: Colorado's Largest Ore Body. By R. L. Herrick. M. & M., vol. 29, p. 294. 6 columns. I.
- REPORT ON THE POVERTY GULCH MINE. By C. W. Henderson. M. & M., vol. 31, p. 586, 5½ columns, I.; p. 694, 7 columns, I.
- GOLD ORE NEAR NEWCASTLE, COLORADO. By F. Rickard. Min. & Sci. Press, vol. 99, p. 503. 1 column. I.
- THE SAN JUAN REGION, COLORADO. By T. T. Read. Min. & Sci. Press, vol. 97, p. 632, 8 columns, I.; p. 668, 10 columns, I.
- GOLD DEPOSITS OF SAN JUAN, COLORADO. By W. C. Prosser. M. & M., vol. 31, p. 335. 5 columns. I.
- MINING IN THE SAN JUAN, COLORADO. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 610, 5½ columns, I.; p. 737, 6½ columns, I.; p. 865, 3½ columns, I.
- THE CRESSON MINE, CRIPPLE CREEK, COLORADO. By R. L. Herrick. M. & M., vol. 31, p. 735. 11½ columns. I.
- LA PLATA MOUNTAINS, COLORADO. By R. H. Toll. Min. & Sci. Press, vol. 97, p. 741. 6½ columns. Map.
- TREASURE MOUNTAIN, COLORADO. By C. W. Purington. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.
- LAKE FORK EXTENSION OF THE SILVERTON MINING AREA, COLORADO. By L. W. Woolsey. U. S. G. S. Bull. 315, p. 26. 5 pages. 1906.
- MINING IN GEORGETOWN QUADRANGLE. By S. H. Ball. M. & M., vol. 30, p. 205. 9½ columns. Map.
- HOHNS PEAK, COLORADO. E. & M. J., vol. 86, p. 809. 2½ columns. I.
- GOLD PLACER DEPOSITS NEAR FAY, ROUTT COUNTY, COLORADO. By H. S. Gale. U. S. G. S., Bull. 340, p. 84. 13 pages. I. 1907.
- THE BLACK HILLS OF SOUTH DAKOTA. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 114, 5 columns, I.; p. 144, 7 columns, I.; p. 264, 7 columns, I.; p. 500, 6 columns; p. 571, 6 columns; p. 669, 6 columns, I.
- DRY PLACERS OF THE BLACK HILLS. Min. & Sci. Press, vol. 101, p. 571. 1½ columns.
- PLACERS OF THE BLACK HILLS, SOUTH DAKOTA. Min. & Sci. Press, vol. 101, p. 573. 2 columns.
- GOLD MINING INDUSTRY IN THE DUTCH EAST INDIES. By E. A. Winton. E. & M. J., vol. 88, p. 513. 4½ columns. Map.
- OCCURRENCE OF AURIFEROUS AND STANIFEROUS TOURMALINE IN SUMATRA. By L. Hundeshagen. E. & M. J., vol. 87, p. 1003. ¼ column.
- GOLD MINING IN EGYPT. By C. S. Herzig. Min. & Sci. Press, vol. 95, p. 212. 4½ columns. I.
- AN ENGLISH GOLD MINE. E. & M. J., vol. 86, p. 98. ¼ column.
- THE BRITISH GOLD FIELDS, ENGLAND. Min. Mag., vol. 2, p. 282, 3 pages; p. 376, 2 pages.
- GOLD MINING IN FRANCE. By T. A. Rickard. Min. Mag., London, vol. 1, p. 283. 4 columns. I.
- GOLD IN FRANCE. P. C. M. & M. Soc. S. A., vol. 7, p. 315. ¼ column.
- THE GREATEST GOLD MINE OF FRANCE. By T. T. Read. Min. Mag. London, vol. 4, p. 209. 7 columns. I.
- THE THREE PRODUCING GOLD MINES OF FRANCE. By E. Walch. E. & M. J., vol. 87, p. 792. 6 columns. I.

- GOLD DEPOSITS OF GEORGIA.** By E. K. Soper. *Min. & Sci. Press*, vol. 100, p. 923. 3½ columns.
- MOORE'S GOLD MINES, DAHLONEGA, GEORGIA.** *Min. Mag.*, vol. 2, p. 24. 3 pages.
- THE GOLD PLACERS OF LUMPKIN COUNTY, GEORGIA.** *Min. Mag.*, vol. 10, p. 457. 20 pages.
- ATLANTA GOLD DISTRICT, IDAHO.** By R. N. Bell. *E. & M. J.*, vol. 86, p. 176. 4 columns. I.
- BOISE BASIN, IDAHO.** By W. A. Scott. *Min. & Sci. Press*, vol. 101, p. 76. 6 columns. I.
- GOLD MINING IN KOREA, 1910.** By J. D. Hubbard. *Min. & Sci. Press*, vol. 101, p. 236. 5 columns. I.
- GOLD DEPOSITS IN JAPAN.** *Min. & Sci. Press*, vol. 101, p. 842. 2½ columns.
- THE PLACER DEPOSITS OF KOREA.** T. A. I. M. E., vol. 39, p. 266. 2 pages. I.
- COPPER-GOLD SMELTING AT MAGISTRAL.** By R. Linton. *Min. & Sci. Press*, vol. 97, p. 843. 6½ columns. I.
- THE ARTEAGA MINING DISTRICT, CHIHUAHUA, MEXICO.** *E. & M. J.*, vol. 89, p. 618. 3 columns. I.
- ARTEAGA DISTRICT, CHIHUAHUA, MEXICO.** By W. B. Winston. *Min. & Sci. Press*, vol. 98, p. 829. 3½ columns. I.
- THE CALABACILLAS MINE, CHIHUAHUA.** By R. T. Sill. *E. & M. J.*, vol. 90, p. 359. 1½ columns. I.
- MINING OPERATIONS IN THE STATE OF CHIHUAHUA, MEXICO.** By W. H. Seamon. *E. & M. J.*, vol. 90, p. 654. 6½ columns.
- THE ARTEAGA DISTRICT, CHIHUAHUA.** By L. T. Pockman. *E. & M. J.*, vol. 90, p. 656. 3½ columns. I.
- YOQUIVO MINE AND MILL, WESTERN CHIHUAHUA.** By W. H. Seamon. *E. & M. J.*, vol. 90, p. 811. 4 columns. I.
- PACHUCA DISTRICT, MEXICO.** By J. L. Mennell. *Min. & Sci. Press*, vol. 100, p. 455. 3 columns. I.
- SANTA GERTRUDE'S AND LA BLANCA MINES, PACHUCA, MEXICO.** *E. & M. J.*, vol. 88, p. 670. 1 column. I.
- THE SANTA GERTRUDE'S MINE, PACHUCA, MEXICO.** *E. & M. J.*, vol. 89, p. 214. 9 columns. I.
- SOME FEATURES OF MINING AT PACHUCA, MEXICO.** *E. & M. J.*, vol. 86, p. 1051. 4½ columns.
- SAN RAFAEL Y ANEXAS MINING COMPANY, PACHUCA, MEXICO.** By E. Girault. *E. & M. J.*, vol. 90, p. 643. 9 columns. I.
- LAS PILARES MINE, SONORA, MEXICO.** By E. M. Robb. *M. & M.*, vol. 31, p. 106. 11½ columns. I.
- OCCURRENCE OF GOLD AND SILVER ORES AT THE LAS PILARES MINE.** *M. & M.*, vol. 106. 2½ columns. I.
- MINAS PEDRAZZINI OPERATIONS NEAR ARIZPE, SONORA, MEXICO.** By E. L. Dufoureq. *E. & M. J.*, vol. 90, p. 1105. 5½ columns.
- MINING IN OAXACA, MEXICO.** By E. M. Lawton. *Min. & Sci. Press*, vol. 99, p. 232. 3½ columns. I.
- THE ESPERANZA MINE, EL ORO, MEXICO.** By W. E. Hindry. *Min. Mag.*, London, vol. 1, p. 131. 10½ columns. I.
- ORE OF THE ESPERANZA MINE, MEXICO.** *Min. & Sci. Press*, vol. 99, p. 847. 2½ columns.
- MINING IN THE ALAMOS AND ARTEAGA DISTRICTS.** By G. M. Bloomer. *E. & M. J.*, vol. 87, p. 699. 6 columns. I.
- ALAMOS-PROMONITOS DISTRICT, MEXICO.** By T. P. Brinegar. *Min. & Sci. Press*, vol. 100, p. 553. 3 columns. I.
- MINING AND SMELTING AT ACHOTTA MINE, GUERRERO, MEXICO.** By W. B. Devereux, Jr. *E. & M. J.*, vol. 90, p. 663.

- EL RAYO GOLD MINE, NEAR SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 78. 7 columns. I.
- SAN JOSE DE GRACIA, A GREAT MEXICAN GOLD CAMP. By E. A. H. Tays. E. & M. J., vol. 88, p. 640. 16 columns. I.
- MINING IN THE SETENTRION, MEXICO. By M. R. Lamb. Min. & Sci. Press, vol. 97, p. 782. 5 columns. I.
- THE LLUVIA DE ORO MINE. By E. A. H. Tays. Min. & Sci. Press, vol. 100, p. 59. 3 columns. I.
- CHICO, MEXICO. Min. & Sci. Press, vol. 101, p. 473. 4 columns.
- TOPOGRAPHICAL AND OTHER NOTES ON THE CHOIX-GUADALUPE Y CALVO MINING DISTRICT, MEXICO. By A. W. Warwick. Min. & Sci. Press, vol. 95, p. 686. 6 columns. I.
- MINES OF ZOMELAHUACAN, VERACRUZ, MEXICO. By M. Fishback. E. & M. J., vol. 90, p. 1017. 6½ columns. I.
- CONDITIONS AT THE PALMILLA MINE, PARRAL, MEXICO. By F. W. Smith. E. & M. J., vol. 90, p. 259. 11½ columns. I.
- HINDS CONSOLIDATED MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 598. 3 columns. I.
- CALABACILLAS GOLD MINE, MEXICO. By C. W. Geddes. Min. & Sci. Press, vol. 98, p. 689. 2½ columns. I.
- THE GRANADENA MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- JALISCO AND COLIMA, MEXICO. By W. A. Scott. Min. & Sci. Press, vol. 98, p. 254. 3 columns. I.
- THE MINES OF NORTHWESTERN ALTAR, SONORA, MEXICO. By G. W. Maynard. E. & M. J., vol. 86, p. 71. 5½ columns. I.
- THE ALTAR GOLD PLACER FIELDS OF SONORA, MEXICO. E. & M. J., vol. 90, p. 651. 6½ columns. I.
- DRY PLACERS IN NORTHERN SONORA, MEXICO. By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 360. 2½ columns. I.
- MINING CEMENT GRAVEL AT ALTAR, MEXICO. By A. Coll. M. & M., vol. 31, p. 229. 4 columns. I.
- RECENT DEVELOPMENTS NEAR HELENA, MONTANA. E. & M. J., vol. 90, p. 354. 1½ columns. Map.
- RADERSBURG DISTRICT, MONTANA. Min. & Sci. Press, vol. 101, p. 170. 3 columns. D.
- NOTES ON THE GEOLOGY OF THE RADERSBURG DISTRICT, MONTANA. By D. C. Bard. E. & M. J., vol. 90, p. 599. 1 column.
- GOLD DEPOSITS OF THE LITTLE ROCKY MOUNTAINS, MONTANA. By W. H. Emmons. U. S. G. S., Bull. 340, p. 96. 20½ pages. I. 1907.
- THE GRANITE BIMETALLIC AND CABLE MINES, PHILIPSBURG QUADRANGLE, MONTANA. By W. H. Emmons. U. S. G. S., Bull. 315, p. 31. 25 pages. I. 1906.
- MINES OF MISSOULA COUNTY, MONTANA. By J. P. Rowe. M. & M., vol. 31, p. 581. 6½ columns. I.
- JUDITH BASIN, MONTANA. Min. & Sci. Press, vol. 101, p. 398. 4½ columns. I.
- GEOLOGICAL AND PHYSICAL CONDITIONS OF TONOPAH MINES. By W. P. Jenney. Min. & Sci. Press, vol. 99, p. 685. 3 columns. I.
- THE MINES AND MILLS OF TONOPAH, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 594. 7 columns. I.
- THE GOLDFIELD TYPE OF ORE OCCURRENCE. By R. T. Hill. E. & M. J., vol. 86, p. 1096. 11½ columns. I.
- GOLDFIELD, NEVADA. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 559, 6½ columns, I.; p. 664, 5 columns; p. 738, 6½ columns, I.; p. 774, 6½ columns, I.; p. 840, 8 columns, I.; vol. 97, p. 20, 4½ columns, I.; p. 50, 7½ columns, I.

- GOLDFIELD AND THE GOLDFIELD DISTRICT OF NEVADA.** By J. Tyssowski. E. & M. J., vol. 87, p. 1229. 6 columns. I.
- RAWHIDE, NEVADA.** By A. Del Mar. E. & M. J., vol. 85, p. 853. 6 columns. I.
- RAWHIDE, NEVADA.** By W. F. Boericke. E. & M. J., vol. 85, p. 565. 1 column.
- NOTES ON RAWHIDE, NEVADA.** Min. & Sci. Press, vol. 96, p. 424. 3½ columns.
- ORE FORMATION IN THE WONDER DISTRICT, NEVADA.** By E. A. Ritter. E. & M. J., vol. 87, p. 290. 7 columns. I.
- MONTGOMERY-SHOSHONE MINE.** By A. H. Martin. Min. & Sci. Press, vol. 100, p. 289. 3 columns. I.
- KIMBERLY, NEVADA.** By J. A. Carpenter. Min. & Sci. Press, vol. 100, p. 482. 3 columns. I.
- MINING AND MILLING AT RAWHIDE, NEVADA.** By G. E. Wolcott. E. & M. J., vol. 87, p. 345. 11 columns. I.
- THE SEVEN TROUGHS MINING DISTRICT.** By W. M. Hanck. E. & M. J., vol. 85, p. 644. 4 columns. I.
- SEVEN TROUGHS DISTRICT OF NEVADA.** By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 790. 6½ columns.
- MANHATTAN, NEVADA.** E. & M. J., vol. 86, p. 1002. 3½ columns. I.
- NOTES ON THE MANHATTAN PLACERS, NYE COUNTY, NEVADA.** By C. C. Jones. E. & M. J., vol. 88, p. 101. 8 columns. I.
- MINES AND PLANTS OF THE PITTSBURG SILVER PEAK.** By H. Hanson. Min. & Sci. Press, vol. 98, p. 657. 9½ columns. I.
- CAMP ALUNITE, A NEW NEVADA GOLD DISTRICT.** By R. T. Hill. E. & M. J., vol. 86, p. 1203. 11 columns. I.
- REMINISCENCES OF GOLDFIELD, NEVADA.** By M. R. Lamb. E. & M. J., vol. 87, p. 441. 5 columns.
- BANNOCK, NEVADA.** By C. S. Thomas. Min. & Sci. Press, vol. 99, p. 820. 1 column. I.
- ROUND MOUNTAIN, NEVADA.** By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 568. 2½ columns. I.
- ROUND MOUNTAIN, NEVADA.** By F. L. Ransome. U. S. G. S., Bull. 380, p. 44. 4 pages. I. 1908.
- ROUND MOUNTAIN, NEVADA.** By G. A. Packard. Min. & Sci. Press, vol. 96, p. 807. 4½ columns. I.
- NATIONAL, NEVADA.** By H. C. Cutler. Min. & Sci. Press, vol. 101, p. 606. 3½ columns. I.
- SOME BULLFROG MINES.** By W. H. Spaulding. E. & M. J., vol. 85, p. 159. 5 columns.
- NOTES ON OPERATIONS IN JARBRIDGE CAMP, NEVADA.** By W. W. Fisk. E. & M. J., vol. 90, p. 763. 5½ columns. Map.
- REPORT ON MINING GEOLOGY OF EUREKA DISTRICT, NEVADA.** By J. S. Curtis. U. S. G. S., 4th Ann. Rept., pp. 221-251. 1882-83. I.
- THE BRISTOL MINES, NEVADA.** By S. L. Goodale. M. & M., vol. 30, p. 507. 4 columns. I.
- JARBRIDGE, NEVADA.** By W. A. Scott. Min. & Sci. Press, vol. 100, p. 613. 4½ columns. I.
- SYLVANITE DISTRICT, NEW MEXICO.** By G. A. Martin. E. & M. J., vol. 86, p. 962. 3½ columns.
- SYLVANITE, NEW MEXICO, THE NEW GOLD CAMP.** By F. A. Jones. E. & M. J., vol. 86, p. 1101. 9 columns. I.
- OCCURRENCE OF ORE AT SYLVANITE, NEW MEXICO.** E. & M. J., vol. 86, p. 1102. 3 columns. I.
- THE BLACK RANGE MINING DISTRICT, NEW MEXICO.** By M. Fishback. E. & M. J., vol. 89, p. 911. 4 columns. I.
- THE COCHITI MINING DISTRICT, NEW MEXICO.** By P. E. Barbour. E. & M. J., vol. 86, p. 173. 6½ columns. I.

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- REVIVAL OF MINING IN THE MOGOLONS, NEW MEXICO. By E. G. Spilbury. E. & M. J., vol. 88, p. 62. 10½ columns. I.
- THE LORDSBURG MINING DISTRICT, NEW MEXICO. By E. D. Fry. E. & M. J., vol. 90, p. 820. 1 column.
- MINES OF THE LORDSBURG DISTRICT, NEW MEXICO. By J. L. Wells. E. & M. J., vol. 87, p. 890. 2½ columns.
- THE MANZANO GROUP OF THE RIO GRANDE VALLEY, NEW MEXICO. By W. T. Lee and G. H. Girty. U. S. G. S., Bull. 389. 141 pages. I. 1909.
- NEW MEXICO GOLD GRAVELS. By J. A. Cartuth. M. & M., vol. 31, p. 117. 5 columns. I.
- GOLD IN THE ADIRONDACKS. E. & M. J., vol. 89, p. 620. 5 columns.
- GOLD AND SILVER MINING IN NEW ZEALAND. By W. Wilson. Min. & Sci. Press, vol. 100, p. 520. 4 columns. I.
- GOLD AND SCHEELITE NEAR MACRAES, NEW ZEALAND. By P. Morgan. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD-BEARING LODS OF BENDIGO AND CARRICK, NEW ZEALAND. By J. Park. Min. & Sci. Press, vol. 97, p. 121. 3½ columns. I.
- THE ORE DEPOSITS OF WAIHI, NEW ZEALAND. By A. M. Finlayson. Min. Mag., London, vol. 2, p. 281. 8½ columns. I.
- SCHEELITE AND GOLD NEAR MACRAES, NEW ZEALAND. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD MINING INDUSTRY IN NICARAGUA. By T. L. Carter. E. & M. J., vol. 90, p. 1204. 8½ columns. I.
- THE MINING INDUSTRY OF NICARAGUA. By T. L. Carter. M. & M., vol. 31, p. 566. 4½ columns. I.
- PIZ-PIZ DISTRICT, NICARAGUA. By W. A. Connelly. Min. & Sci. Press, vol. 100, p. 350. 4 columns. Map.
- GOLD IN EASTERN NICARAGUA. By C. C. Semple. Min. & Sci. Press, vol. 99, p. 221. 6½ columns. I.
- NOTES ON THE NICARAGUAN GOLDFIELDS. By M. R. Walker. E. & M. J., vol. 88, p. 263. 3½ columns. I.
- HOW CAN THE GOLD MINING INDUSTRY OF NOVA SCOTIA BE ASSISTED? By E. P. Brown. J. M. Soc. N. S., vol. 13, p. 33. 13½ pages.
- SOME OF THE CAUSES OF THE PRESENT CONDITION OF GOLD MINING IN NOVA SCOTIA. By G. W. Stuart. J. M. Soc. N. S., vol. 12, p. 85. 19½ pages.
- GOLD MEASURES OF TANGIER, NOVA SCOTIA. By G. A. Packard. Min. & Sci. Press, vol. 95, p. 430. 4 columns. I.
- THE OLDHAM STERLING GOLD MINE, NOVA SCOTIA. By C. V. Brennan. J. C. M. I., vol. 10, p. 426. 16 pages. I.
- A PRACTICAL SUGGESTION FOR TESTING THE GOLD MINES OF NOVA SCOTIA. By F. P. Rounan. J. M. Soc. N. S., vol. 13, p. 27. 6 pages.
- WICHITA MOUNTAINS, OKLAHOMA. By G. W. Kneisly. Min. & Sci. Press, vol. 97, p. 873. 1 column. Map.
- REPORT ON ORE DEPOSITS OF THE WICHITA MOUNTAIN, OKLAHOMA. By H. F. Bain. U. S. G. S., Professional Paper 31, 97 pages. I. 1904.
- CRACKER CREEK DISTRICT, OREGON. By J. T. Padree. Min. & Sci. Press, vol. 100, p. 585. 3½ columns. I.
- FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON. By J. T. Padree. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.
- THE NORTH POLE MINE, BAKER COUNTY, OREGON. By E. Melzer. E. & M. J., vol. 89, p. 868. 4½ columns. I.

- GOLD MINES IN EASTERN OREGON.** Min. & Sci. Press, vol. 101, p. 141. 2½ columns. I.
- RYE VALLEY GOLD MINES, OREGON.** By A. Mathez. Min. & Sci. Press, vol. 99, p. 687. 1½ columns. I.
- MINES OF THE RIDDLES QUADRANGLE, OREGON.** By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 340, p. 134. 19 pages. I. 1907.
- NOTES ON THE BOHEMIA MINING DISTRICT, OREGON.** By D. F. MacDonald. U. S. G. S., Bull. 380, p. 80. 5 pages. 1908.
- PLACER GRAVELS OF THE SUMPTER AND GRANITE DISTRICTS, EASTERN OREGON.** By J. T. Pardee. U. S. G. S., Bull. 430, p. 59. 7 pages. I. 1909.
- PLACERS OF WALDO, SOUTH OREGON.** By J. M. Nicol. Min. & Sci. Press, vol. 99, p. 122. 2½ columns. I.
- BEDDED GOLD QUARTZ VEINS NEAR POTO, PERU.** By E. C. Thurston. E. & M. J., vol. 90, p. 597. 3½ columns. I.
- PERUVIAN PLACER MINES.** Min. & Sci. Press, vol. 101, p. 741. ¼ column.
- SAN ANTONIO DE POTO HYDRAULIC MINE, PERU.** By W. E. G. Firebrace. Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- ANDEAN PLACERS, PERU AND BOLIVIA.** Min. & Sci. Press, vol. 99, p. 61. 1 column.
- THE PHILIPPINE GOLD MINES.** By M. Woolley. M. & M., vol. 31, p. 464. 4 columns. I.
- GOLD IN THE PHILIPPINES.** By H. G. Ferguson. E. & M. J., vol. 88, p. 1165. 5 columns. I.
- ABROY DISTRICT, MASBATE, PHILIPPINE ISLANDS.** Min. & Sci. Press, vol. 100, p. 388. 3 columns.
- PARACALE AND MAMBULAO DISTRICTS.** By W. D. Smith. Min. & Sci. Press, vol. 100, p. 453. 4 columns.
- RUSSIAN FAR EASTERN GOLD FIELD.** M. & M., vol. 31, p. 447. 2 columns.
- GOLD MINING IN SIBERIA.** Min. & Sci. Press, vol. 20, p. 394. 1½ columns.
- GOLD AND OTHER MINERALS OF EASTERN SIBERIA.** By S. F. G. White. E. & M. J., vol. 87, p. 1034. 4½ columns.
- MINING IN SIBERIA.** By C. W. Purington. Min. & Sci. Press, vol. 98, p. 251. 3 columns.
- KOLCHAN PLACER OF THE ARSK GOLD-FIELDS, LTD.** By C. W. Purington. E. & M. J., vol. 90, p. 1202. 5½ columns.
- GOLD AND SILVER IN TENNESSEE.** Min. Mag., vol. 8, p. 237. 4½ pages.
- GOLD AND SILVER IN TURKEY.** Min. & Sci. Press, vol. 98, p. 823. 1 column.
- RECONNAISSANCE OF SOME GOLD AND TIN DEPOSITS OF THE SOUTHERN APPALACHIANS.** By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.
- EXAMINATIONS AND EXPLORATIONS ON THE GOLD-BEARING BELTS OF THE ATLANTIC STATES.** Min. Mag., vol. 2, p. 378, 10½ pages, I.; vol. 3, p. 161, 7½ pages.
- THE SOUTH UTAH MINE AND MILL.** By L. Palmer. M. & M., vol. 31, p. 592. 8½ columns. I.
- MINING IN THE TINTIC DISTRICT OF UTAH.** By L. A. Palmer. M. & M., vol. 31, p. 553. 8 columns. I.
- MINES AND MILL OF THE CONSOLIDATED MERCUR COMPANY.** By R. H. Allen. E. & M. J., vol. 89, p. 1273. 13½ columns. I.
- MINES IN REPUBLIC DISTRICT, WASHINGTON.** By W. A. Scott. Min. & Sci. Press, vol. 101, p. 200. 4 columns. I.
- GOLD-BEARING RIVER SANDS OF NORTHEASTERN WASHINGTON.** By A. J. Collier. U. S. G. S., Bull. 315, p. 56. 15 pages. 1906.
- CUBAN GOLD MINES.** By E. B. Wilson. M. & M., vol. 31, p. 240. 1 column.

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CUBAN GOLD MINING. By E. W. Dennison. Min. & Sci. Press, vol. 97, p. 500. $\frac{1}{2}$ column.

GOLD MINING IN PORTO RICO. By W. B. McKinlay. Min. & Sci. Press, vol. 97, p. 96, $5\frac{1}{2}$ columns; p. 126, $7\frac{1}{2}$ columns, 1.

GOLD DEVELOPMENTS IN CENTRAL UTAH COUNTY, WYOMING, AND AT OTHER POINTS ON SNAKE RIVER. By A. R. Schultz. U. S. G. S., Bull. 315, p. 71. 18 pages. I. 1906.

WIND RIVER PLACERS, WYOMING. By J. H. Hastings. Min. & Sci. Press, vol. 98, p. 864. 1 column.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.

Occurrence of Graphite

GRAPHITE: Its Occurrence and Use. M. & M., vol. 30, p. 394. $3\frac{1}{2}$ columns. I.

CANADIAN GRAPHITE. By H. P. H. Brumell. J. C. M. I., vol. 10, p. 83. 20 pages.

MODES OF OCCURRENCE OF CANADIAN GRAPHITE. By H. P. H. Brumell. J. C. M. I., vol. 11, p. 236. $14\frac{1}{2}$ pages.

CANADIAN GRAPHITE. By H. M. Lamb. E. & M. J., vol. 85, p. 360. $5\frac{1}{2}$ columns.

GRAPHITE DEPOSITS NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Phalen. U. S. G. S., Bull. 340, p. 463. $2\frac{1}{2}$ pages. 1907.

GRAPHITE IN MAINE. By G. O. Smith. U. S. G. S., Bull. 285, p. 480. 4 pages. 1905.

THE GRAPHITE MINES OF SANTA MARIA, MEXICO. By J. C. Mills. M. & M., vol. 29, p. 98. $2\frac{1}{2}$ columns. I.

THE FLAKE GRAPHITE INDUSTRY IN THE UNITED STATES. By F. D. Chester. E. & M. J., vol. 88, p. 785. 2 columns.

SUPPOSED DEPOSITS OF GRAPHITE NEAR BRIGHAM, UTAH. By H. S.

Gale. U. S. G. S., Bull. 430, p. 639. 2 pages. 1909.

GRAPHITE IN THE HAYSTACK HILLS, LARAMIE COUNTY, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 426. 2 pages. 1906.

See also DRY CONCENTRATION.

Auriferous Gravels

BLACK SANDS. By A. R. Townsend. E. & M. J., vol. 85, p. 307. $4\frac{1}{2}$ columns.

GRAVEL MINING IN TASMANIA. Min. Mag., London, vol. 3, p. 383. $1\frac{1}{2}$ columns. I.

THE PACIFIC COAST BEACH SANDS. By C. Bartlett. M. & M., vol. 30, p. 375. $3\frac{1}{2}$ columns.

USEFUL MINERALS IN BLACK SANDS OF PACIFIC COAST. By D. T. Day and R. H. Richards. U. S. G. S., Mineral Resources, 1905. 73 pages.

DRY PLACERS IN NORTHERN SONORA, MEXICO. Min. & Sci. Press, vol. 97, p. 380. $2\frac{1}{2}$ columns. I.

See also OCCURRENCE OF GOLD.

Occurrence of Gypsum

GYPSUM MINING. By W. J. Jones. M. & M., vol. 29, p. 490. $1\frac{1}{2}$ columns. I.

THE GYPSUM DEPOSITS OF THE PALEN MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA. By E. C. Harder. U. S. G. S., Bull. 430, p. 407. 10 pages. I. 1909.

GYPSUM DEPOSITS NEAR CANE SPRINGS, KERN COUNTY, CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 430, p. 417. 2 pages. 1909.

A RECONNAISSANCE OF THE GYPSUM DEPOSITS OF CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 413. 37 pages. I. 1910.

GYPSUM OF THE UNCOMPAHGRE REGION, COLORADO. By C. E. Sieben-thal. U. S. G. S., Bull. 285, p. 401. 4 pages. I. 1905.

- GYPNUM DEPOSITS OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1243. 3 columns. I.
- GYPNUM IN NORTHWESTERN NEW MEXICO.** By M. K. Shaler. U. S. G. S., Bull. 315, p. 260. 5 pages. I. 1906.
- GYPNUM ON CAPE BRETON ISLAND, NOVA SCOTIA.** By J. Tyssowski. E. & M. J., vol. 88, p. 569. 4 columns. Map.
- OKLAHOMA GYPNUM DEPOSITS.** E. & M. J., vol. 85, p. 315. $\frac{1}{2}$ column.
- SALT AND GYPNUM OF THE PRESTON VALLEY OF THE HOLSTON RIVER, VIRGINIA.** By H. D. Rogers. Min. Mag., vol. 4, p. 28. 7 pages.
- GYPNUM DEPOSITS OF THE LARAMIE DISTRICT, WYOMING.** By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 404. 2 pages. 1905.
- Occurrence of Iron Ores**
- THE SUPPLY OF IRON.** By J. F. Kemp. Min. Mag., London, vol. 3, p. 363. 7 columns.
- THE SUPPLIES AND RESERVES OF IRON ORES.** By J. Birkinbine. J. C. M. I., vol. 10, p. 134. 14 $\frac{1}{2}$ pages.
- MAGNETIC IRON ORE: Magnetite, Magnetic Oxide of Iron, and Lode-stone.** Min. Mag., vol. 4, p. 121. 14 pages.
- THE BLACK BAND, OR MUSHET IRON-STONE.** Min. Mag., vol. 4, p. 19. 9 $\frac{1}{2}$ pages.
- ON THE OCCURRENCE OF ORES OF IRON IN THE AZOIC SYSTEM.** By J. D. Whitney. Min. Mag., vol. 7, p. 67. 4 pages.
- FRANKLINITE IRON ORES: Their Uses and Quantity.** Min. Mag., vol. 10, p. 105. 4 pages.
- AGGLOMERATION OF MANGANIFEROUS LIMONITE ORE.** By F. Witte. E. & M. J., vol. 90, p. 216. 4 $\frac{1}{2}$ columns. I.
- IRON IN THE BELGIAN CONGO.** T. A. I. M. E., vol. 41, p. 210. 4 pages.
- IRON ORES, FUELS AND FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.
- IRON OPERATIONS OF THE BIRMINGHAM DISTRICT.** By E. Higgins. E. & M. J., vol. 86, p. 1043. 18 $\frac{1}{2}$ columns. I.
- IRON OPERATIONS IN NORTHEASTERN ALABAMA.** By E. Higgins. E. & M. J., vol. 86, p. 1083. 12 columns. I.
- THE IRON ORE INDUSTRY IN ALABAMA.** By E. A. Smith. E. & M. J., vol. 85, p. 1159. 4 columns.
- AN ESTIMATE ON THE TONNAGE OF AVAILABLE CLINTON IRON ORE IN THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 340, p. 308. 10 pages. I. 1907.
- THE CLINTON OR RED ORES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 130. 21 $\frac{1}{2}$ pages. 1906.
- THE BROWN IRON ORES OF THE RUSSELLVILLE DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 152. 7 pages. 1906.
- THE GRAY IRON ORES OF TALLADEGA COUNTY, ALABAMA.** By P. S. Smith. U. S. G. S., Bull. 315, p. 161. 23 $\frac{1}{2}$ pages. 1906.
- THE CLINTON IRON-ORE DEPOSITS OF ALABAMA.** By E. F. Burchard. T. A. I. M. E., vol. 40, p. 75. 59 pages. I.
- THE OCCURRENCE OF IRON ORE NEAR HAINES, SOUTHEASTERN ALASKA.** By A. Knopf. U. S. G. S., Bull. 442, p. 144. 3 pages. 1909.
- TWO IMPORTANT IRON ORE DEPOSITS OF AUSTRALIA.** By J. B. Wilson. E. & M. J., vol. 89, p. 724. 16 $\frac{1}{2}$ columns. I.
- IRON ORE DEPOSITS OF BRAZIL.** By O. A. Derby. E. & M. J., vol. 88, p. 1258. 3 $\frac{1}{2}$ columns.

- BRAZIL'S IRON-ORE DEPOSITS.** By G. E. Anderson. *M. & M.*, vol. 31, p. 7. 5 columns.
- MAGNETITE DEPOSITS OF TEXADA AND VANCOUVER ISLANDS.** By E. Lindeman. *J. C. M. I.*, vol. 13, p. 107. 15½ pages. Map.
- THE EMMA MINE BOUNDARY DISTRICT, BRITISH COLUMBIA.** By F. Keffer. *J. C. M. I.*, vol. 10, p. 188. 6½ pages. I. Map.
- OCCURRENCE OF MAGNETITE IN THE EMMA MINE, BRITISH COLUMBIA.** *J. C. M. I.*, vol. 10, p. 188. 6 pages. I.
- AN IRON DEPOSIT IN THE CALIFORNIA DESERT REGION.** By C. C. Jones. *E. & M. J.*, vol. 87, p. 785. 10 columns. I.
- IRON ORES OF CALIFORNIA.** By H. C. Harder. *Min. & Sci. Press*, vol. 101, p. 79. 3½ columns. Map.
- OCCURRENCE OF AN IRON ORE DEPOSIT IN THE CALIFORNIA DESERT REGION.** *E. & M. J.*, vol. 87, p. 785. 10 columns. I.
- SOME IRON ORES OF WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. *U. S. G. S., Bull.* 430, p. 219. 8½ pages. 1909.
- THE IRON AGE IRON-ORE DEPOSIT, NEAR DALE, SAN BERNARDINO COUNTY, CALIFORNIA.** By E. C. Harder and J. L. Rich. *U. S. G. S., Bull.* 430, p. 228. 12 pages. I. 1909.
- IRON ORES OF THE SOUTHWEST.** By C. C. Jones. *M. & M.*, vol. 31, p. 574. 4½ columns.
- CHROME ORE IN CALIFORNIA.** By C. G. Yale. *E. & M. J.*, vol. 85, p. 101. ¾ column.
- SOME CHROMITE DEPOSITS IN WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. *U. S. G. S., Bull.* 430, p. 167. 16½ pages. I. 1909.
- THE IRON ORES OF ONTARIO.** By A. B. Willmott. *J. C. M. I.*, vol. 11, p. 106. 18 pages.
- THE IRON ORES OF CANADA.** By C. K. Leith. *J. C. M. I.*, vol. 11, p. 91. 16 pages.
- OCCURRENCE OF IRON ORES AT BRUCE MINES, ONTARIO.** *J. C. M. I.*, vol. 10, p. 158. 2 pages. D.
- IRON MINING POSSIBILITIES IN THE PROVINCE OF QUEBEC.** By F. Cirkel. *J. C. M. I.*, vol. 10, p. 108. 10 pages. D.
- IRON RANGES OF NORTHERN AND NORTHWESTERN ONTARIO.** *E. & M. J.*, vol. 89, p. 360. 7 columns.
- THE MOOSE MOUNTAIN IRON RANGE, WITH SPECIAL REFERENCE TO THE PROPERTIES OF MOOSE MOUNTAIN, LIMITED.** By N. L. Leach. *J. C. M. I.*, vol. 11, p. 147. 4 pages.
- THE BRUCE MINES, ONTARIO, 1846-1906.** By H. J. Carnegie Williams. *J. C. M. I.*, vol. 10, p. 147. 22 pages. I.
- THE HELEN MINE, MICHIPICOTEN, ONTARIO: Iron Ore.** By R. W. Seelye. *J. C. M. I.*, vol. 13, p. 121. 14½ pages. I.
- CHROME IRON MINING AND MILLING IN CANADA.** By H. F. Strangways. *E. & M. J.*, vol. 85, p. 595. 7 columns. I.
- CHROME ORE IN CANADA.** By P. Thompson. *E. & M. J.*, vol. 88, p. 726. 2½ columns.
- THE MOOSE MOUNTAIN IRON RANGE, CANADA.** By J. J. Bell. *E. & M. J.*, vol. 85, p. 805. 2½ columns. I.
- THE IRON RANGES EAST OF LAKE NIPIGON, ONTARIO.** By A. P. Coleman and E. S. Moore. *E. & M. J.*, vol. 83, p. 445. 2 columns.
- CANADIAN IRON ORE INDUSTRY.** *M. & M.*, vol. 31, p. 455. 6½ columns. I.
- MINING IRON UNDER THE SEA.** By H. W. Buker. *M. & M.*, vol. 31, p. 569. 7 columns. I.
- IRON, STEEL AND FUEL IN CHINA.** By W. D. B. Dodson. *Min. & Sci. Press*, vol. 97, p. 494. 2½ columns.

- THE TAYEH IRON MINES, CHINA. By A. J. Seltzer. Min. & Sci. Press, vol. 100, p. 546. 5 columns. I.
- THE TAYLOR PEAK AND WHITEPINE IRON ORE DEPOSITS, COLORADO. By E. C. Harder. U. S. G. S., Bull. 380, p. 188. 10½ pages. I. 1908.
- TAYLOR PEAK IRON DEPOSITS. By E. C. Harder. Min. & Sci. Press, vol. 100, p. 615. 5 columns. I.
- THE HEMATITE MINES OF CUMBERLAND, ENGLAND. By L. W. Mayer. E. & M. J., vol. 86, p. 358. 18½ columns. I.
- IRON ORES NEAR ELLIJAY, GEORGIA. By W. C. Phalen. U. S. G. S., Bull. 340, p. 330. 5 pages. 1907.
- REVIEW OF FOSSIL IRON ORE DEPOSITS OF GEORGIA. By S. M. Ball. E. & M. J., vol. 88, p. 200. 13½ columns. I.
- GEORGIA BROWN IRON ORE WASH-ERIES. By E. F. McCrossin. M. & M., vol. 31, p. 294. 2½ columns. I.
- THE LORRAINE DEPOSITS OF OÖLITIC IRON ORE, GERMANY. By Tony Callot. E. & M. J., vol. 87, p. 1221. 16 columns. I.
- THE ILSEDE HÜTTE IRON MINES AT PEINE, GERMANY. By L. W. Mayer. T. A. I. M. E., vol. 39, p. 351. 6½ pages. I.
- IRON RESOURCES OF THE REPUBLIC OF MEXICO. By E. Ordoñez. E. & M. J., vol. 90, p. 665. 6½ columns.
- IRON EXPLORATIONS IN OAXACA, MEXICO. E. & M. J., vol. 90, p. 668. 10 columns. I.
- EXPLORATION OF CERTAIN IRON ORE AND COAL DEPOSITS IN THE STATE OF OAXACA, MEXICO. By J. L. W. Birkinbine. T. A. I. M. E., vol. 41, p. 166. 23 pages. I.
- NOTES FROM THE LAKE SUPERIOR IRON RANGES. By D. E. Woodbridge. E. & M. J., vol. 89, p. 863. 3½ columns.
- THE GOGEBIC RANGE. T. L. S. M. I., vol. 15, p. 10. 16 pages.
- THE MARQUETTE IRON RANGE. By G. A. Newett. T. L. S. M. I., vol. 14, p. 19. 12 pages. Map.
- DEVELOPMENT IN THE MARQUETTE RANGE IRON ORE MINES. M. & M., vol. 30, p. 195. 6 columns. I.
- IRON MINING IN MINNESOTA. By E. K. Soper. Min. & Sci. Press, vol. 101, p. 767. 5½ columns. I.
- IRON MINING AT COLORAINE, MINNESOTA. By A. H. Fay. E. & M. J., vol. 88, p. 770. 3 columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. U. S. G. S., Bull. 430, p. 240. 6 pages. I. 1909.
- WHITEPINE IRON-ORE DEPOSITS. By E. C. Harder. Min. & Sci. Press, vol. 100, p. 387. 3 columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. Min. & Sci. Press, vol. 101, p. 212. 2 columns. Map.
- AMARILLA IRON AND PHOSPHATE DEPOSITS, NEVADA. By O. H. Hershey. Min. & Sci. Press, vol. 97, p. 535. 3½ columns.
- PYRITE MINING IN NEW HAMPSHIRE. By A. H. Fay. E. & M. J., vol. 88, p. 463. 2 columns. I.
- IRON ORE IN NEW JERSEY. By H. W. Kümmel. E. & M. J., vol. 85, p. 1193. 2 columns.
- IRON ORE OF NEW JERSEY: Geological Occurrence, Properties and Metallurgy. By W. Kitchell. Min. Mag., vol. 8, p. 332, 16 pages; p. 434. 4 pages.
- THE HANOVER IRON ORE DEPOSITS, NEW MEXICO. By S. Paige. U. S. G. S., Bull. 380, p. 199. 16 pages. I. 1908.
- HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. Min. & Sci. Press, vol. 100, p. 285. 3½ columns. I.
- THE FOREST OF DEAN IRON MINE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 85, p. 1091. 5½ columns. I.

- THE MAGNETITE BELTS OF PUTNAM COUNTY, NEW YORK.** By C. A. Stewart. Sch. Mines Quart., vol. 29, p. 283. 12 pages. I.
- THE IRON DEPOSITS OF NEW YORK STATE.** By J. D. Whitney. Min. Mag., vol. 7, p. 255. 3½ pages.
- THE CLINTON IRON ORE DEPOSITS IN NEW YORK STATE.** By D. H. Newland. T. A. I. M. E., vol. 40, p. 165. 19½ pages. I.
- GEOLOGY OF THE IRON ORE DEPOSIT, ORANGE COUNTY, NEW YORK.** E. & M. J., vol. 85, p. 1091. 2 columns. I.
- NEW BRUNSWICK AND THE ACADIAN IRON MINES.** Min. Mag., vol. 6, p. 117. 8 pages.
- IRON ORES OF NOVA SCOTIA.** By P. Thompson. E. & M. J., vol. 88, p. 358. 1½ columns.
- A NEW IRON ORE FIELD IN THE PROVINCE OF NEW BRUNSWICK.** By J. E. Hardman. J. C. M. I., vol. 11, p. 156. 9 pages.
- THE DISCOVERY OF IRON ORE IN THE NEW BRUNSWICK PROVINCE.** J. C. M. I., vol. 11, p. 159. 6 pages.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN PENNSYLVANIA.** By A. C. Spencer. U. S. G. S., Bull. 359. 102 pages. I. 1908.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN BERKS AND LEBANON COUNTIES, PENNSYLVANIA.** By A. C. Spencer. U. S. G. S., Bull. 315, p. 185. 4½ pages. 1906.
- THE JONES IRON MINE, DILLSBURG, PENNSYLVANIA.** By A. C. Spencer. U. S. G. S., Bull. 430, p. 247. 3 pages. 1909.
- THE CLINTON IRON ORE DEPOSITS IN THE STONE VALLEY, HUNTINGDON COUNTY, PENNSYLVANIA.** By J. J. Rutledge. T. A. I. M. E., vol. 40, p. 134. 30 pages. I.
- DEPOSITS OF BROWN IRON ORE NEAR DILLSBURG, YORK COUNTY, PENNSYLVANIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 250. 5½ pages. 1909.
- PRODUCTION OF IRON ORE IN SPAIN.** By H. A. McBride. M. & M., vol. 31, p. 577. 6½ columns. I.
- THE GEOLOGICAL RELATION OF THE SCANDINAVIAN IRON ORES.** By H. Sjögren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- TONNAGE ESTIMATES OF CLINTON IRON ORE IN THE CHATTANOOGA REGION OF TENNESSEE, GEORGIA AND ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 380, p. 169. 20 pages. 1908.
- IRON OPERATIONS IN THE CHATTANOOGA DISTRICT.** By E. Higgins. E. & M. J., vol. 87, p. 1. 15 columns. I.
- PRELIMINARY REPORT ON PRE-CAMBRIAN GEOLOGY AND IRON ORES OF LLANO COUNTY, TEXAS.** By S. Paige. U. S. G. S., Bull. 430, p. 256. 12 pages. 1909.
- IRON IN TURKEY.** Min. & Sci. Press, vol. 98, p. 823. ¼ column.
- GEOLOGICO-GEOGRAPHICAL DISTRIBUTION OF THE IRON ORES OF THE EASTERN U. S.** By J. C. Smock. T. A. I. M. E., vol. 12, p. 130.
- IRON ORE SUPPLY OF THE UNITED STATES.** By C. W. Hayes. Min. & Sci. Press, vol. 98, p. 798. 3 columns.
- IRON OCCURRENCES IN THE EASTERN HALF OF THE UNITED STATES.** E. & M. J., vol. 90, p. 206. 2½ columns. Map.
- IRON ORES EAST OF THE MISSISSIPPI RIVER.** By J. Birkinbine. U. S. G. S., Mineral Resources, 1886, vol. 8. 65 pages.
- THE IRON ORES OF THE IRON SPRINGS DISTRICT, SOUTHERN UTAH.** By C. K. Leith. U. S. G. S., Bull. 338. 102 pages. I. 1908.
- THE IRON ORES OF THE APPALACHIAN REGION IN VIRGINIA.** By E. C. Harder. U. S. G. S., Bull. 380, p. 215. 40 pages. I. 1908.
- THE PRIDEVALE IRON COMPANY'S MINES, VIRGINIA.** By W. B. Rogers.

- Min. Mag., vol. 3, p. 489, 8½ pages; vol. 5, p. 397; 14 pages. I. Map.
- IRON ORES OF SANTIAGO, CUBA.** By E. B. Wilson. M. & M., vol. 31, p. 245. 8½ columns. I.
- THE RESIDUAL BROWN IRON ORES OF CUBA.** By C. M. Weld. T. A. I. M. E., vol. 40, p. 299. 13½ pages. I.
- THREE DEPOSITS OF IRON ORE IN CUBA.** By A. C. Spencer. U. S. G. S., Bull. 340, p. 318. 12 pages. I. 1907.
- THE IRON ORES OF WISCONSIN.** By E. Daniels. Min. Mag., vol. 10, p. 13. 12 pages.
- THE HARTVILLE IRON-ORE RANGE, WYOMING.** By S. H. Ball. U. S. G. S., Bull. 315, p. 190. 15½ pages. I. 1906.
- TITANIFEROUS IRON ORE OF IRON MOUNTAIN, WYOMING.** By S. H. Ball. U. S. G. S., Bull. 315, p. 206. 7 pages. 1906.
- See also **THE IRON TRADE.**
- See also **THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.**
- Occurrence of Lead and Zinc Ores**
- LEAD INDUSTRY.** By C. Kirchhoff, Jr. U. S. G. S., Mineral Resources 1883 and 1884, vol. 14.
- ST. EUGENE MINE AND MILL, EAST KOOTENAY, BRITISH COLUMBIA.** By E. Jacobs. E. & M. J., vol. 89, p. 420. 7 columns. I.
- LEAD MINES IN SHAN STATES, CHINA.** E. & M. J., vol. 88, p. 550. 16½ columns. I.
- OCCURRENCE OF LEAD ORE AT LEADVILLE.** E. & M. J., vol. 89, p. 263. 4 columns. I.
- THE LEADVILLE DOWNTOWN DISTRICT.** Min. & Sci. Press, vol. 95, p. 58. 1 column.
- THE MONTEZUMA MINING DISTRICT, COLORADO.** By E. A. Ritter. E. & M. J., vol. 85, p. 241. 9½ columns. I.
- THE GREENSIDE LEAD MINES, CUMBERLAND, ENGLAND.** By E. T. Borlase. E. & M. J., vol. 85, p. 297. 10 columns. I.
- LEAD MINING AT MECHERNICH, PRUSSIA.** By L. W. Mayer. E. & M. J., vol. 86, p. 169. 11½ columns. I.
- THE WILLISTON LEAD AND COPPER MINE, NORTHAMPTON DISTRICT, MASSACHUSETTS.** By C. K. Richardson. Min. Mag., vol. 2, p. 395, 2 pages; p. 634, 2 pages.
- THE CABRILLAS LEAD MINES OF COAHUILA, MEXICO.** By S. J. Lewis. E. & M. J., vol. 89, p. 1071. 8 columns. I.
- THE GRANADENA MINES, MEXICO.** By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- MINING AND TRANSPORTATION AT SANTA EULALIA.** By C. T. Rice. E. & M. J., vol. 86, p. 33. 9½ columns. I.
- ORES AND MINES OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1283. 9 columns. I.
- THE ORE DEPOSITS OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1229. 10 columns. I.
- THE CUCHILLO PARADO DISTRICT.** By R. H. Burrows. Min. & Sci. Press, vol. 95, p. 408. 1½ columns. I.
- LEAD MINING IN THE JOPLIN DISTRICT.** By L. L. Wittich. M. & M., vol. 30, p. 743. 4½ columns. I.
- OPERATIONS OF THE DOE RUN LEAD COMPANY.** By A. H. Fay. E. & M. J., vol. 89, p. 610. 9 columns. I.
- THE YELLOW PINE MINING DISTRICT OF NEVADA.** By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- THE SHELburnE LEAD MINING COMPANY, NEW HAMPSHIRE.** By J. T. Hodge. Min. Mag., vol. 1, p. 27, 7½ pages, I.; vol. 3, p. 481, 10 pages.
- LUNA COUNTY, NEW MEXICO.** By E. McCormick. Min. & Sci. Press, vol. 98, p. 328. 1½ columns.
- LEAD IN TURKEY.** Min. & Sci. Press, vol. 98, p. 823. 1 column.

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- THE GEOLOGY OF THE UPPER MISSISSIPPI LEAD REGION.** By J. V. Phillips. *Min. Mag.*, vol. 2, p. 129. 9½ pages. I.
- THE LEAD VEINS OF WISCONSIN.** *Min. Mag.*, vol. 2, p. 493. 11½ pages.
- ZINC AND LEAD IN ARKANSAS.** By L. L. Wittich. *M. & M.*, vol. 31, p. 10. 3 columns. Map.
- THE SILVER-LEAD-ZINC MINES AT BROKEN HILL, NEW SOUTH WALES.** By G. W. Williams. *E. & M. J.*, vol. 86, p. 793. 16½ columns. I.
- REMINISCENCES OF BROKEN HILL.** By J. Warren. *T. A. I. M. E.*, vol. 9, p. 1. 23 pages. I.
- RECENT DEVELOPMENTS ON IRON HILL, LEADVILLE.** By G. O. Argall. *E. & M. J.*, vol. 89, p. 261. 16 columns. I.
- LEAD AND ZINC MINING IN IOWA.** *E. & M. J.*, vol. 86, p. 805. 1 column.
- OZARK LEAD- AND ZINC-DEPOSITS: Their Genesis, Localization, and Migration.** Discussion of Paper of C. R. Keyes, vol. 40, p. 184.
T. A. I. M. E., vol. 40, p. 856. 5½ pages.
- LEAD AND ZINC ORES IN MISSOURI.** By J. R. Finlay. *E. & M. J.*, vol. 86, p. 605. 15½ columns. I.
- THE ORE DEPOSITS OF THE JOPLIN REGION, MISSOURI.** By F. L. Clerc. *T. A. I. M. E.*, vol. 38, p. 320. 23 pages.
- ZINC AND LEAD DEPOSITS OF SOUTHWESTERN MISSOURI.** By F. L. Garrison. *Min. & Sci. Press*, vol. 96, p. 291, 7 columns, I.; p. 325, 7½ columns, I.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** *M. & M.*, vol. 31, p. 327. 3 columns.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** By L. L. Wittich. *M. & M.*, vol. 31, p. 31. 1½ columns.
- TRES HERMANAS MINING DISTRICT, NEW MEXICO.** By W. Lindgren. *Min. & Sci. Press*, vol. 100, p. 491. 2 columns.
- THE TRES HERMANAS MINING DISTRICT, NEW MEXICO.** By W. Lindgren. *U. S. G. S., Bull.* 380, p. 123. 5 pages. 1908.
- MINERAL RESOURCES OF NORTHEASTERN OKLAHOMA.** By C. E. Sieben-thal. *U. S. G. S., Bull.* 340, p. 187. 42 pages. I. 1907.
- OKLAHOMA'S NEW ZINC-LEAD DISTRICT.** *E. & M. J.*, vol. 87, p. 496. 2½ columns.
- MIAMI LEAD AND ZINC DISTRICT IN OKLAHOMA.** By O. Ruhl. *E. & M. J.*, vol. 86, p. 910. 8 columns. I.
- LEAD AND ZINC ORES OF VIRGINIA.** By M. M. Caldwell. *M. & M.*, vol. 30, p. 269. 2 columns.
- THE ZINC DEPOSITS OF MOHAVE COUNTY, ARIZONA.** *E. & M. J.*, vol. 89, p. 775. 2½ columns.
- THE ZINC ORES OF LA MALLIEUE (BELGIUM).** By H. De Rauw. *T. I. M. E.*, vol. 37, p. 651. 1½ pages.
- LEADVILLE, COLORADO, ZINC DEPOSITS.** By H. E. Burton. *M. & M.*, vol. 31, p. 436. 2 columns.
- ZINC MINING IN CHIHUAHUA, MEXICO.** By W. H. Seamon. *E. & M. J.*, vol. 90, p. 679. 1½ columns.
- DEL CARMEN ZINC MINE, MEXICO.** *M. & M.*, vol. 31, p. 437. 4½ columns. I.
- BOQUILLAS ZINC DEPOSITS, MEXICO.** By C. Mour. *M. & M.*, vol. 31, p. 479. 1½ columns. I.
- THE MINING OF OXIDIZED ZINC ORES.** By L. L. Wittich. *M. & M.*, vol. 30, p. 276. 2 columns. I.
- MIGRATIONS OF THE JOPLIN ZINC BELT.** By C. R. Keyes. *E. & M. J.*, vol. 87, p. 1049. 2½ columns. I.
- ZINC MINING IN BUTTE, MONTANA.** *E. & M. J.*, vol. 87, p. 912. 1 column.
- ZINC MINING AT YELLOW PINE, NEVADA.** By N. B. Gregory. *M. & M.*, vol. 31, p. 340. 2½ columns. I.

THE TYNTICHA ZINC MINE, SIBERIA.
By C. W. Purington. *Min. & Sci. Press*, vol. 99, p. 200. 1½ columns.

THE EAST TENNESSEE ZINC MINING DISTRICT. By S. W. Osgood. *E. & M. J.*, vol. 87, p. 401. 9½ columns. I.

CHARACTER OF ORE IN THE EAST TENNESSEE ZINC DISTRICT. *E. & M. J.*, vol. 87, p. 402. ¼ column.

GEOGRAPHIC DISTRIBUTION OF LEAD AND ZINC DEPOSITS OF THE MISSISSIPPI VALLEY. By C. R. Keyes. *E. & M. J.*, vol. 86, p. 1004. 3 columns.

IRON AND ZINC IN SOUTHWESTERN VIRGINIA. *E. & M. J.*, vol. 86, p. 908. 3 columns. I.

THE EMPIRE-ENTERPRISE ZINC MINES, WISCONSIN. By H. C. George. *E. & M. J.*, vol. 89, p. 1280. 6½ columns. I.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.

See also THEORY OF ORE DEPOSITS.

See also MISCELLANEOUS PRODUCTION.

Occurrence of Manganese

MANGANESE ORE IN UNUSUAL FORM. By W. P. Blake. *T. A. I. M. E.*, vol. 41, p. 647. 2½ pages.

USES OF MANGANESE. By E. C. Harder. *U. S. G. S., Bull.* 427. 208 pages.

See also UNITED STATES.

MANGANESE DEPOSITS OF MORRO DA MINA, BRAZIL. By J. Lustosa and J. C. Branner. *E. & M. J.*, vol. 86, p. 1196. 5½ columns. I.

MAGNESITE DEPOSITS OF CALIFORNIA. By F. L. Hess. *U. S. G. S., Bull.* 355. 67 pages. I. 1908.

MAGNESITE IN CALIFORNIA. *E. & M. J.*, vol. 87, p. 292. ¼ column.

SOME MAGNESITE DEPOSITS OF CALIFORNIA. By F. L. Hess. *U. S. G. S., Bull.* 285, p. 385. 8 pages. 1905.

A MANGANESE DEPOSIT IN SOUTHERN INDIA. By R. O. Ahles. *T. I. M. & M.*, vol. 18, p. 133. 20 pages. I.

MANGANESE DEPOSITS IN SOUTHERN INDIA. *E. & M. J.*, vol. 87, p. 955. 2½ columns.

MANGANESE MINING IN THE CAUCASUS. By A. Muls. *Min. Mag.*, London, vol. 2, p. 439. 4 columns. I.

MANGANESE DEPOSITS OF THE UNITED STATES. By E. C. Harder. *U. S. G. S., Bull.* 380, p. 255. 22 pages. I. 1908.

MANGANESE DEPOSITS OF THE UNITED STATES, WITH SECTIONS ON FOREIGN DEPOSITS, CHEMISTRY AND USES. By E. C. Harder. *U. S. G. S., Bull.* 427. 208 pages. I.

See also MISCELLANEOUS DISTRICTS.

MANGANESE DEPOSITS OF VIRGINIA. By S. M. Ball. *E. & M. J.*, vol. 87, p. 1056. 1½ columns.

MANGANESE DEPOSITS OF THE BLUE RIDGE, VIRGINIA. By L. G. Lockett. *E. & M. J.*, vol. 89, p. 867. 1 column.

See also THEORY OF ORE DEPOSITS.

Miscellaneous Materials

NONMETALLIFEROUS MINERAL RESOURCES OF SOUTHEASTERN ALASKA. By C. W. Wright. *U. S. G. S., Bull.* 314, p. 73. 8 pages. 1906.

METALLIC SULPHIDES IN ALLUVIAL GOLD DEPOSITS. By F. L. Garrison. *Min. & Sci. Press*, vol. 101, p. 812. 2 columns.

RADIUM IN AUSTRALIA. By J. Plummer. *Min. & Sci. Press*, vol. 100, p. 292. 1½ columns.

MARINE FIBER DEPOSITS OF SOUTH AUSTRALIA. By H. L. Jene. *E. & M. J.*, vol. 88, p. 965. 2 columns. I.

SODIUM SULPHATE IN SAN LUIS OBISPO COUNTY, CALIFORNIA. By R. Arnold and H. R. Johnson. *Min. & Sci. Press*, vol. 99, p. 855. 1½ columns.

280 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- SODIUM SULPHATE IN SODA LAKE, CARRISO PLAIN, SAN LUIS OBISPO COUNTY, CALIFORNIA.** By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 380, p. 369. 3 pages. 1908.
- TRIPOLI DEPOSITS OF CALIFORNIA.** Min. & Sci. Press, vol. 95, p. 54. $\frac{1}{2}$ column.
- TRIPOLI DEPOSITS NEAR SENECA, MISSOURI.** By C. E. Siebenthal and R. D. Mesler. U. S. G. S., Bull. 340, p. 429. 10 pages. I. 1907.
- TOURMALINE IN CALIFORNIA.** By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 864. 4 columns.
- PERIDOTITE OF ELLIOTT COUNTY, KENTUCKY.** By J. S. Diller. U. S. G. S., Bull. 38. 31 pages. I. 1887.
- MEERSCHAUM IN NEW MEXICO.** By D. B. Sterrett. U. S. G. S., Bull. 340, p. 466. 6 pages. 1907.
- LIMESTONE AND DOLOMITE IN THE BIRMINGHAM DISTRICT, ALABAMA.** By C. Butts. U. S. G. S., Bull. 315, p. 247. 9 pages. 1906.
- THE NIOHARA LIMESTONE OF NORTHERN COLORADO AS A POSSIBLE SOURCE OF PORTLAND CEMENT MATERIAL.** By G. C. Martin. U. S. G. S., Bull. 380, p. 314. 13 pages. I. 1908.
- THE MARLS OF NEW JERSEY.** By G. H. Cook. Min. Mag., vol. 5, p. 132. 14 pages.
- LITHOGRAPHIC STONE.** By S. J. Kübel. U. S. G. S., Mineral Resources, 1900. 4 pages.
- GANISTER IN BLAIR COUNTY, PENNSYLVANIA.** By C. Butts. U. S. G. S., Bull. 380, p. 337. 5 pages. 1908.
- GRAVEL AND SAND IN THE PITTSBURG DISTRICT, PENNSYLVANIA.** By E. W. Shaw. U. S. G. S., Bull. 430, p. 388. 12 pages. I. 1909.
- THE BEREA OIL SAND IN FLUSHING QUADRANGLE, OHIO.** By W. T. Griswold. U. S. G. S., Bull. 346, 30 pages. I. 1908.
- THE BEREA GRIT OIL SAND IN THE CADIZ QUADRANGLE, OHIO.** By W. T. Griswold. U. S. G. S., Bull. 198, 43 pages. I. 1902.
- THE LIME INDUSTRY OF KNOX COUNTY, MAINE.** By E. S. Bastin. U. S. G. S., Bull. 285, p. 393. 8 pages. I. 1905.
- SAND-LIME BRICKMAKING NEAR BIRMINGHAM, ALABAMA.** By C. Butts. U. S. G. S., Bull. 315, p. 256. 2 pages. 1906.
- TALC AND SOAPSTONE IN VERMONT.** By G. H. Perkins. E. & M. J., vol. 86, p. 753. 2 $\frac{1}{2}$ columns.

Occurrence of Rare Metals

- RARE EARTHS: Their Occurrence and Use.** By C. Bogenrieder. T. Au. I. M. E., vol. 13, p. 87. 28 pages.
- THE RARE METALS: Beryllium.** By C. Baskerville. E. & M. J., vol. 86, p. 907. 2 $\frac{1}{2}$ columns.
- MINERALS OF THE RARE-EARTH METALS AT BARINGER HILL, LLANO COUNTY, TEXAS.** By F. L. Hess. U. S. G. S., Bull. 340, p. 286. 8 pages. 1907.
- BORON: Its Occurrence and Uses.** By E. B. Wilson. M. & M., vol. 30, p. 168. 4 $\frac{1}{2}$ columns.
- THE RARE METALS: Columbium.** By C. Baskerville. E. & M. J., vol. 86, p. 960. 2 $\frac{1}{2}$ columns.
- CARNOTITE IN RIO BLANCO COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 315, p. 110. 8 pages. I. 1906.
- CARNOTITE AND ASSOCIATED MINERALS IN WESTERN ROUTT COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 340, p. 257. 6 pages. 1907.
- LITHIUM AND ITS SOURCES.** By F. L. Hess. Min. & Sci. Press, vol. 100, p. 822. 5 columns.
- THE RARE METALS: Molybdenum.** By C. Baskerville. E. & M. J., vol. 86, p. 1055. 2 $\frac{1}{2}$ columns.

SOME MOLYBDENUM DEPOSITS OF MAINE, UTAH, AND CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 340, p. 231. 10 pages. 1907.

SOME OCCURRENCES OF MOLYBDENITE IN THE SANTA RITA AND PATAGONIA MOUNTAINS, ARIZONA. By F. C. Schrader and J. M. Hill. U. S. G. S., Bull. 430, p. 154. 10 pages. I. 1909.

THE RARE METALS: Tantalum. By C. Baskerville. E. & M. J., vol. 86, p. 1110. 2½ columns.

TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

THE RARE METALS: Thorium. By C. Baskerville. E. & M. J., vol. 86, p. 1241. 4 columns.

THE THORIUM NITRATE INDUSTRY. M. & M., vol. 30, p. 768. 1½ columns.

THE RARE METALS: Titanium. By C. Baskerville. E. & M. J., vol. 87, p. 10. 4 columns.

RARE METALS: Uranium. By C. Baskerville. E. & M. J., vol. 87, p. 257. 4 columns.

RARE METALS: Vanadium. By C. Baskerville. E. & M. J., vol. 87, p. 518. 3 columns.

THE PRESENT SOURCE AND USES OF VANADIUM. By J. K. Smith. T. A. I. M. E., vol. 38, p. 698. 6 pages.

COLORADO'S RARE METAL INDUSTRY. By H. Fleck. M. & M., vol. 30, p. 63. 3½ columns.

OCCURRENCE OF VANADIUM NEAR TELLURIDE, COLORADO. By E. R. Zolinski. E. & M. J., vol. 85, p. 1152. 4 columns. I.

VANADIUM IN PERU. By S. Jochamowitz. E. & M. J., vol. 87, p. 996. ½ column.

VANADIUM DEPOSITS IN PERU. By D. F. Hewett. Min. & Sci. Press, vol. 98, p. 619. 5½ columns.

Occurrence of Mica

MICA: Its Characteristics and Commerce. E. & M. J., vol. 87, p. 941. 3 columns.

THE MICA INDUSTRY IN CANADA. By F. Cirkel. E. & M. J., vol. 85, p. 801. 3½ columns. I.

MICA DEPOSITS OF WESTERN NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 315, p. 400. 22 pages. I. 1906.

MICA DEPOSITS OF NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 430, p. 593. 48 pages. I. 1909.

MICA DEPOSITS OF SOUTH DAKOTA. By D. B. Sterrett. U. S. G. S., Bull. 380, p. 382. 3 pages. 1908.

MICA DEPOSITS IN SOUTH DAKOTA. By D. B. Sterrett. Min. & Sci. Press, vol. 99, p. 826. 4 columns. I.

MICA IN THE HARTVILLE UPLIFT, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 423. 3 pages. 1906.

See also **THEORY OF ORE DEPOSITS.**

Occurrence of Monazite

AN OCCURRENCE OF MONAZITE IN NORTHERN IDAHO. By F. C. Schrader. U. S. G. S., Bull. 430, p. 184. 7 pages. I. 1909.

MONAZITE DEPOSITS OF THE CAROLINAS. By D. B. Sterrett. U. S. G. S., Bull. 340, p. 272. 14 pages. I. 1907.

MONAZITE AND MONAZITE MINING IN THE CAROLINAS. By J. H. Pratt and D. B. Sterrett. T. A. I. M. E., vol. 40, p. 313. 28 pages. I.

Occurrence of Natural Gas

NATURAL GAS. By J. D. Weeks. U. S. G. S., Mineral Resources, 1886, vol. 8.

NATURAL GAS. P. E. Soc. W. Pa., vol. 2, p. 331, 27½ pages; p. 401, 10 pages.

THE BOTTINEAN GAS FIELD, NORTH DAKOTA. By J. G. Barry. E. & M. J., vol. 87, p. 1089. 3 columns.

NATURAL GAS FIELD OF INDIANA. By A. J. Phinney. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 579-742. 1889-90. I.

PETROLEUM AND NATURAL GAS IN THE PHILIPPINES. By W. D. Smith. E. & M. J., vol. 88, p. 1285. 1½ columns.

GAS FIELDS OF THE BIGHORN BASIN WYOMING. By C. W. Washburne. U. S. G. S., Bull. 340, p. 348. 16 pages. I. 1907.

Occurrence of Nickel

NICKEL ORE IN NEVADA. E. & M. J., vol. 86, p. 23. ¼ column.

NICKEL-COPPER-PLATINUM ORE IN NEVADA. By A. M. Thompson. E. & M. J., vol. 86, p. 72. ¼ column.

NICKEL DEPOSITS OF NICKEL MOUNTAIN, OREGON. By G. F. Kay. U. S. G. S., Bull. 315, p. 120. 8 pages. 1906.

THE OCCURRENCE OF NICKEL IN VIRGINIA. By T. L. Watson. T. A. I. M. E., vol. 38, p. 683. 16 pages. I.

NICKEL IN SOME VIRGINIA IRON-ORES. T. A. I. M. E., vol. 39, p. 547. 2 pages.

See also **THEORY OF ORE DEPOSITS.**

Ocher Deposits

OCHE DEPOSITS OF EASTERN PENNSYLVANIA. By J. C. Stoddard and A. C. Callen. U. S. G. S., Bull. 430, p. 424. 15 pages. I. 1909.

THE MINERAL-POINT ORES OF LEHIGH GAP, PENNSYLVANIA. By E. C. Eckel. U. S. G. S., Bull. 315, p. 435. 3 pages. 1906.

PAINT-ORE DEPOSITS NEAR LEHIGH GAP, PENNSYLVANIA. By F. T. Agthe and J. L. Dynan. U. S. G. S., Bull. 430, p. 440. 14 pages. I. 1909.

Occurrence of Onyx, Sapphire, Emerald, Ruby, Turquoise, Etc.

THE RUBY. By M. R. Ward. M. & M., vol. 31, p. 319. 3½ columns. I.

THE TURQUOISE MINING DISTRICT, ARIZONA. By J. M. Platt. E. & M. J., vol. 87, p. 213. 1½ columns.

GEYSERITE: A Variety of Opal, in Germany. E. & M. J., vol. 90, p. 820. 1 column. I.

THE GREATEST GEM MINE IN THE WORLD. P. C. M. & M. Soc. S. A., vol. 7, p. 99. ½ column.

GEMS IN NEW SOUTH WALES AND QUEENSLAND. By F. S. Mance. E. & M. J., vol. 86, p. 115. ¼ column.

SOME NOTES ON THE WHITE CLIFFS OPAL FIELDS, WILCANNIA, NEW SOUTH WALES. By F. G. de v. Gipps. T. A. I. M. E., vol. 2, p. 70, 6 pages; p. 76, 5 pages. I.

RUBY MINES OF THE MOGOK VALLEY BURMA. Min. & Sci. Press, vol. 99, p. 231. 1½ columns.

GENESIS AND CLASSIFICATION OF MEXICAN ONYX. By E. M. Lawton. Min. & Sci. Press, vol. 100, p. 791. 1½ columns.

MONTANA SAPPHIRES. M. & M., vol. 29, p. 199. ¼ column.

SAPPHIRE IN MONTANA. Min. & Sci. Press, vol. 95, p. 433. ¼ column.

TURQUOISE MINING, BURRO MOUNTAINS, NEW MEXICO. By E. R. Zalinski. E. & M. J., vol. 86, p. 843. 10 columns. I.

AMATRICE, A NEW GEM STONE OF UTAH. By E. R. Zalinski. E. & M. J., vol. 87, p. 1038. 6 columns.

Occurrence of Peat

THE UTILIZATION OF PEAT FOR INDUSTRIAL AND METALLURGICAL PURPOSES. By E. Nystrom. J. C. M. I., vol. 11, p. 231. 5 pages.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S.

- G. S., Bull. 379, p. 63. 4 pages. 1908.
- THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA.** By C. A. Davis. U. S. G. S., Bull. 442, p. 101. 32 pages. 1909.
- See also the UNITED STATES.
- PEAT IN CANADA.** E. & M. J., vol. 88, p. 361. 2 columns.
- THE PEAT FUEL INDUSTRY OF CANADA.** E. & M. J., vol. 87, p. 905. 1 column.
- PEAT BEDS IN INDIANA.** E. & M. J., vol. 88, p. 789. $\frac{1}{2}$ column.
- PEAT DEPOSITS OF MAINE.** By E. S. Bastin and C. A. Davis. U. S. G. S., Bull. 376. 127 pages. I. 1909.
- PEAT.** By H. H. Hindshaw. U. S. G. S., Mineral Resources, 1904.
- PEAT DEPOSITS.** By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 4. 9 pages.
- Occurrence of Petroleum**
- PETROLEUM: Occurrence and Use.** By Max Livingston. P. E. Soc. W. Pa., vol. 2, p. 193. 14 columns.
- THE OIL SHALES OF THE MARITIME PROVINCES.** By R. W. Ellis. J. M. Soc. N. S., vol. 14, p. 1. 12 $\frac{1}{2}$ pages.
- ECONOMIC POSSIBILITIES OF AMERICAN OIL SHALES.** By C. Baskerville. E. & M. J., vol. 88, p. 149, 15 $\frac{1}{2}$ columns, I.; p. 195, 13 $\frac{1}{2}$ columns, I.
- OCCURRENCE OF OIL AND GAS.** By W. Forestner. Min. & Sci. Press, vol. 101, p. 634. 8 $\frac{1}{2}$ columns. I.
- CLASSIFICATION OF PETROLEUM AND NATURAL GAS FIELDS BASED ON STRUCTURE.** By F. G. Clapp. Min. & Sci. Press, vol. 101, p. 80. $\frac{1}{2}$ column.
- S. PEARSON AND SON'S UNCONTROLLABLE OIL GUSHER.** E. & M. J., vol. 87, p. 7. 9 columns. I.
- THE USE OF GEOLOGICAL SCIENCE IN THE PETROLEUM AND NATURAL GAS BUSINESS.** By F. G. Clapp. P. E. Soc. W. Pa., vol. 26, p. 87. 34 pages. I.
- OILS OF WEST AFRICA.** E. & M. J., vol. 87, p. 1037. 3 columns.
- NOTES ON THE PETROLEUM FIELDS OF ALASKA.** By G. C. Martin. U. S. G. S., Bull. 259, p. 128. 11 $\frac{1}{2}$ pages. I.
- PETROLEUM AT CONTROLLER BAY.** By G. C. Martin. U. S. G. S., Bull. 314, p. 89. 35 pages. I. 1906.
- THE PETROLEUM FIELDS OF THE PACIFIC COAST OF ALASKA, WITH AN ACCOUNT OF THE BERING RIVER COAL DEPOSITS.** By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.
- KATALLA, ALASKA, OIL FIELD.** By W. T. Prosser. M. & M., vol. 31, p. 731. 1 $\frac{1}{2}$ columns.
- THE AUSTRALIAN OIL SHALE INDUSTRY.** E. & M. J., vol. 87, p. 1051. 1 $\frac{1}{2}$ columns.
- OIL SHALE DEPOSITS, BLUE MOUNTAINS, NEW SOUTH WALES.** By H. L. Jene. E. & M. J., vol. 90, p. 407. 4 $\frac{1}{2}$ columns. D.
- OIL RESOURCES OF CALIFORNIA.** By M. L. Requa. Min. Mag. London, vol. 4, p. 47. 10 $\frac{1}{2}$ columns. Map.
- OIL INDUSTRY IN CALIFORNIA IN 1909.** Min. & Sci. Press, vol. 100, p. 97. 5 columns. I.
- PETROLEUM DEVELOPMENT IN SAN JOAQUIN VALLEY.** E. & M. J., vol. 89, p. 964. 7 columns.
- THE CALIFORNIA OIL INDUSTRY.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 857. 5 $\frac{1}{2}$ columns.
- GEOLOGY OF THE COALINGA DISTRICT, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.
- PRELIMINARY REPORT ON THE COALINGA OIL DISTRICT IN FRESNO AND KINGS COUNTIES, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 357. 142 pages. I. 1908.

284 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- OIL MEASURES IN THE COALINGA DISTRICT, CALIFORNIA. By W. Forstner. Min. & Sci. Press, vol. 98, p. 386. 3½ columns.
- GEOLOGY AND OIL RESOURCES OF THE SANTA MARIA OIL DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 322. 161 pages. I. 1907.
- GEOLOGY AND OIL RESOURCES OF THE SUMMERLAND DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 321. 91 pages. I. 1907.
- PRELIMINARY REPORT ON MCKITTRICK-SUNSET OIL REGION, CALIFORNIA. By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 406. 225 pages. I. 1910.
- THE SALT LAKE OIL FIELD NEAR LOS ANGELES, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 285, p. 357. 5 pages. I. 1905.
- THE MINER RANCH OIL FIELD, CONTRA COSTA COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 340, p. 339. 4 pages. 1907.
- LAKE VIEW GUSHER: A Large Oil Well in Midway Field, California. Min. & Sci. Press, vol. 100, p. 925. 2 columns. I.
- THE LOS ANGELES OIL INDUSTRY. By P. E. Barbour. E. & M. J., vol. 88, p. 365. 5 columns.
- THE TILBURY AND ROMNEY OIL-FIELDS IN ONTARIO. E. & M. J., vol. 85, p. 363. 1 column.
- THE COMMERCIAL VALUE OF THE OIL-SHALES OF EASTERN CANADA, BASED ON THEIR CONTENTS, BY ANALYSIS IN CRUDE OIL AND AMMONIUM SULPHATE. By R. W. Ellis. J. M. Soc. N. S., vol. 15, p. 29. 28 pages.
- THE NEW TILBURY AND ROMNEY OIL FIELDS OF KENT COUNTY, ONTARIO. By E. Coste. J. C. M. I., vol. 10, p. 77. 8 pages.
- THE FLORENCE OIL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 331, p. 517. 28 pages. I. 1908.
- THE DEVELOPMENT IN THE BOULDER OIL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 331, p. 514. 2½ pages. 1908.
- GEOLOGY OF THE RANGEL OIL DISTRICT, COLORADO, WITH A SECTION ON THE WATER SUPPLY. By H. S. Gale. U. S. G. S., Bull. 350. 60 pages. I. 1908.
- OIL-SHALE AT PUMPHERSTON, SCOTLAND. By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.
- THE PUMPHERSTON, SEAFIELD, AND DEANS WORKS OF THE PUMPHERSTON OIL COMPANY. T. I. M. E., vol. 36, p. 602. 8 pages.
- PETROLEUM FIELDS OF ILLINOIS. By H. F. Bain. Min. & Sci. Press, vol. 99, p. 153. 4½ columns. I.
- PUMPING AND SHIPPING OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 678. 6 columns. I.
- PETROLEUM IN BURMA. By E. A. Wakefield. Min. & Sci. Press, vol. 99, p. 500. 1½ columns.
- THE TRENTON LIMESTONE AS A SOURCE OF PETROLEUM AND INFLAMMABLE GAS IN OHIO AND INDIANA. By E. Orton. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 475-662. 1886-87. I.
- OIL AND GAS IN LOUISIANA, WITH A BRIEF SUMMARY OF THEIR OCCURRENCE IN ADJACENT STATES. By G. D. Harris. U. S. G. S., Bull. 429. 192 pages. I. 1910.
- MEXICAN OILFIELDS. E. & M. J., vol. 87, p. 1233. 1 column.
- OIL DEVELOPMENTS IN MEXICO. E. & M. J., vol. 88, p. 660. 1½ columns.
- THE OIL FIELDS OF MEXICO. By H. S. Denny. Min. Mag., London, vol. 3, p. 36. 8 columns. Map.
- OIL IN MEXICO. By J. L. Mennell. Min. Mag., London, vol. 2, p. 448. 5 columns. Map.

- OIL IN MEXICO.** By A. R. Skertchly. Min. Mag., London, vol. 3, p. 283. 6 columns. I.
- OIL IN THE STATE OF VERA CRUZ, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 95, p. 247. 3½ columns. I.
- OIL PROSPECTS IN NEVADA.** Min. & Sci. Press, vol. 97, p. 817. 2 columns.
- TWO AREAS OF OIL PROSPECTING IN LYON COUNTY, WESTERN NEVADA.** By R. Anderson. U. S. G. S., Bull. 381, p. 490. 3 pages. 1908.
- ALLEGED OIL PROSPECTS IN NEVADA.** M. & M., vol. 29, p. 335. 1½ columns.
- GEOLOGY AND OIL PROSPECTS OF THE RENO REGION, NEVADA.** By R. Anderson. U. S. G. S., Bull. 381, p. 475. 15 pages. 1908.
- ANALYSES OF CRUDE PETROLEUM FROM OKLAHOMA AND KANSAS.** By D. T. Day. U. S. G. S., Bull. 381, p. 494. 10 pages. 1908.
- THE MADILL OIL POOL, OKLAHOMA.** By J. A. Taff and W. J. Reed. U. S. G. S., Bull. 381, p. 504. 12 pages. I. 1908.
- THE MALHEUR OILFIELDS OF OREGON.** E. & M. J., vol. 88, p. 512. ½ column.
- THE NINEVEH AND GORDON OIL SANDS IN WESTERN GREENE COUNTY, PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 285, p. 362. 4½ pages. 1905.
- RECENT PROGRESS AT MAIKOP: A Russian Oil Field.** By T. J. Hoover. Min. Mag., London, vol. 4, p. 298. 3 columns. I.
- PROBLEMS OF THE RUSSIAN OIL INDUSTRY.** By F. Richards. E. & M. J., vol. 88, p. 69. 4 columns.
- RUSSIAN PETROLEUM.** M. & M., vol. 30, p. 655. 3 columns.
- OILFIELDS OF SAKHALIN.** By C. E. Pfaffius. Min. Mag., London, vol. 3, p. 447. 2 columns.
- MAIKOP OIL-FIELD.** By A. B. Thompson. Min. Mag., London, vol. 2, p. 277. 7½ columns. I.
- OIL INDUSTRY OF THE UNITED STATES.** Min. & Sci. Press, vol. 96, p. 202. 5½ columns.
- THE PETROLEUM FIELDS OF THE UNITED STATES.** By W. G. Burroughs. E. & M. J., vol. 89, p. 921. 11 columns. I.
- PETROLEUM IN SOUTHERN UTAH.** By G. B. Richardson. U. S. G. S., Bull. 340, p. 343. 5 pages. 1907.
- THE NEW OILFIELD IN UTAH.** By A. P. Rogers. E. & M. J., vol. 87, p. 989. 2½ columns. I.
- PETROLEUM IN VENEZUELA.** E. & M. J., vol. 90, p. 506. 1½ columns.
- PETROLEUM INDUSTRY, VENEZUELA.** M. & M., vol. 31, p. 158. 1½ columns.
- WEST VIRGINIA OIL AND GAS NOTES.** E. & M. J., vol. 90, p. 823. 4½ columns.
- OIL FIELD AT FOLLANSBEE, WEST VIRGINIA.** By F. W. Brady. M. & M., vol. 29, p. 207. 4½ columns. I.
- NOTES FROM THE OIL FIELDS.** By F. W. Brady. M. & M., vol. 30, p. 156. 3½ columns. I.
- THE LABARGE OIL FIELD, CENTRAL UTAH COUNTY, WYOMING.** By A. R. Schultz. U. S. G. S., Bull. 340, p. 364. 9 pages. I. 1907.
- See also **THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.**
- See also **MISCELLANEOUS PRODUCTION.**

Occurrence of Phosphates

- PHOSPHATE CLAIMS ON PUBLIC LANDS.** Min. & Sci. Press, vol. 98, p. 862. 4½ columns.
- See also **UNITED STATES.**
- PHOSPHATE DEPOSITS OF OCEAN AND PLEASANT ISLANDS.** By F. D. Powers. T. Au. I. M. E., vol. 10, p. 213. 20 pages. I.

- INVESTIGATION ON THE ROCK GUANO FROM THE ISLANDS OF THE CARIBBEAN SEA. By W. J. Taylor. *Min. Mag.*, vol. 8, p. 438. 11 pages.
- PHOSPHATES IN TUNIS. E. & M. J., vol. 88, p. 177. 1½ columns.
- DEVELOPED PHOSPHATE DEPOSITS OF NORTHERN ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 315, p. 463. 11 pages. 1906.
- THE CLARENDON PHOSPHATE DEPOSIT, NEAR DUNEDIN, NEW ZEALAND. By A. Andrew. T. Au. I. M. E., vol. 11, p. 177. 20 pages. I.
- PHOSPHATE MINING IN BELGIUM. T. I. M. E., vol. 37, p. 683. 2½ pages.
- DEVELOPMENTS IN THE FLORIDA PHOSPHATE INDUSTRY. By C. G. Memminger. E. & M. J., vol. 89, p. 184. 3 columns.
- PRODUCTION OF PHOSPHATE ROCK IN FLORIDA DURING 1908. By E. H. Sellards. E. & M. J., vol. 88, p. 129. 1½ columns.
- PHOSPHATE MINING IN FLORIDA. E. & M. J., vol. 85, p. 597. 1 column.
- PHOSPHOROUS ORE AT MOUNT HOLLY SPRINGS, PENNSYLVANIA. By G. W. Stose. U. S. G. S., Bull. 315, p. 474. 9 pages. 1906.
- PHOSPHATE DEPOSITS IN THE PHILIPPINES. U. S. G. S., 21st Ann. Rept., pt. 3, 644 pages. 1899-1900. I.
- CONDITION OF THE PHOSPHATE INDUSTRY IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 89, p. 180. 3 columns.
- PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 153. 3½ columns. I.
- PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 404. 2 columns.
- PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 573. 2 columns.
- PHOSPHATE ROCK IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 1150. 2½ columns.
- PHOSPHATE DEPOSITS OF UNITED STATES. By F. B. Van Horn. *Min. & Sci. Press*, vol. 99, p. 88. 5 columns.
- PHOSPHATE DEPOSITS IN WESTERN UNITED STATES. By F. B. Weeks and W. F. Ferrier. U. S. G. S., Bull. 315, p. 449. 14 pages. I. 1906.
- PHOSPHATE DEPOSITS IN THE WESTERN UNITED STATES. By F. B. Weeks. U. S. G. S., Bull. 340, p. 441. 6½ pages. 1907.
- See also MISCELLANEOUS DISTRICTS.
- PHOSPHATE DEPOSITS EAST OF OGDEN, UTAH. By E. Blackwelder. U. S. G. S., Bull. 430, p. 536. 15 pages. I. 1909.
- PRELIMINARY REPORT ON THE PHOSPHATE DEPOSITS IN SOUTHEASTERN IDAHO AND ADJACENT PARTS OF WYOMING AND UTAH. By H. S. Gale and R. W. Richards. U. S. G. S., Bull. 430, p. 457. 82 pages. I. 1909.
- See also THEORY OF ORE DEPOSITS.
- Occurrence of Platinum**
- PLATINUM. By F. W. Horton. U. S. G. S., *Mineral Resources*, 1905. 12 pages.
- THE GEOLOGICAL RELATIONS AND DISTRIBUTION OF PLATINUM AND ASSOCIATED METALS. By J. F. Kemp. U. S. G. S., Bull. 193. 95 pages. I. 1902.
- PLATINUM DEPOSITS IN BRITISH COLUMBIA. J. C. M. I., vol. 13, p. 317. 2½ pages.
- PLATINUM MINING IN THE TULAMEEN DISTRICT, BRITISH COLUMBIA. By C. Camshell. J. C. M. I., vol. 13, p. 309. 15 pages. I. Map.
- GEOLOGY OF THE PLATINUM DEPOSITS OF COLOMBIA. By J. C. Castillo. *Min. & Sci. Press*, vol. 98, p. 826. 3½ columns. I.
- PLATINUM IN SOUTHEASTERN NEVADA. By H. Bancroft. U. S. G. S., Bull. 430, p. 192. 7 pages. I. 1909.

PLATINUM IN SOUTHEASTERN NEVADA. By H. C. Bancroft. *Min. & Sci. Press*, vol. 100, p. 797. $\frac{1}{2}$ column.

PLATINUM AT THE CRACKER JACK MINE, DOUGLAS COUNTY, OREGON. By H. B. Pulsifer. *E. & M. J.*, vol. 86, p. 1003. $2\frac{1}{2}$ columns.

RUSSIAN PLATINUM AND FOREIGN COMPANIES IN RUSSIA. By V. K. Prardinsky. *E. & M. J.*, vol. 89, p. 1025. $5\frac{1}{2}$ columns.

RUSSIAN PLATINUM DEVELOPMENTS. M. & M., vol. 30, p. 400. 2 columns.

PLATINUM IN THE UNITED STATES. By D. T. Day. *Min. & Sci. Press*, vol. 100, p. 582. $\frac{1}{2}$ column.

PLATINUM IN RAMBLER MINE, WYOMING. By J. F. Kemp. *U. S. G. S., Mineral Resources*, 1902. 7 pages.

See also **THEORY OF ORE DEPOSITS.**

Occurrence of Quicksilver

RARE MERCURY ORES. By C. G. Dennis. *Min. & Sci. Press*, vol. 95, p. 92. 1 column. I.

NOTES ON THE OCCURRENCE OF CINNABAR IN CENTRAL WESTERN ARIZONA. By H. Bancroft. *U. S. G. S., Bull.* 430, p. 151. 3 pages. 1909.

MERCURY MINES AT KONIAH, ASIA MINOR. By F. F. Sharpless. *E. & M. J.*, vol. 86, p. 602. $7\frac{1}{2}$ columns. I.

QUICKSILVER IN CALIFORNIA. *Min. & Sci. Press*, vol. 100, p. 15. $3\frac{1}{2}$ columns. Map.

MERCURY MINES OF NEW ALMADEN, CALIFORNIA. *Min. Mag.*, vol. 10, p. 142. $2\frac{1}{2}$ pages.

DULCES NOMBRES QUICKSILVER DEPOSIT, MEXICO. By P. A. Babb. *E. & M. J.*, vol. 88, p. 684. $7\frac{1}{2}$ columns. I.

QUICKSILVER IN NEVADA. By W. C. Davis. *Min. & Sci. Press*, vol. 99, p. 663. $\frac{1}{2}$ column. I.

QUICKSILVER AT HUANCAYETICA, PERU. By L. W. Strauss. *Min. & Sci. Press*, vol. 99, p. 561. $11\frac{1}{2}$ columns. I.

CINNABAR IN SPAIN. *Min. Mag.*, vol. 7, p. 150. $4\frac{1}{2}$ pages.

CONDITION OF THE QUICKSILVER INDUSTRY IN TEXAS. By W. B. Phillips. *E. & M. J.*, vol. 88, p. 1022. 8 columns.

MERCURY MINERALS FROM TERLINGUA, TEXAS. By W. F. Hillsbrand and W. T. Schaller. *U. S. G. S., Bull.* 405. 174 pages. I. 1909.

MERCURY IN TURKEY. *Min. & Sci. Press*, vol. 98, p. 826. 1 column.

QUICKSILVER PRODUCTION IN FOREIGN COUNTRIES. By H. W. Turner. *Min. & Sci. Press*, vol. 100, p. 16. $1\frac{1}{2}$ columns.

Occurrence of Rutile

THE VIRGINIA RUTILE DEPOSITS. By F. L. Watson and S. Taber. *U. S. G. S., Bull.* 430, p. 200. 14 pages. I. 1909.

RUTILE DEPOSITS OF VIRGINIA. *Min. & Sci. Press*, vol. 98, p. 896. $1\frac{1}{2}$ columns.

Occurrence of Salt

THE SALINE DEPOSITS OF CARMEN ISLANDS. By E. H. Cook. *E. & M. J.*, vol. 85, p. 545. $3\frac{1}{2}$ columns. I.

DESTRUCTION OF THE SALT-WORKS OF THE COLORADO DESERT BY THE SALTON SEA. By W. P. Blake. *T. A. I. M. E.*, vol. 38, p. 848. 1 page.

THE SALT MINING INDUSTRY IN THE RUSSIAN EMPIRE. By F. Thiess. *T. I. M. E.*, vol. 37, p. 702. $1\frac{1}{2}$ pages.

SALT AND GYPSUM OF THE PRESTON VALLEY OF THE HOLSTON RIVER, VIRGINIA. By H. D. Rogers. *Min. Mag.*, vol. 4, p. 28. 7 pages.

THE SALT RESOURCES OF THE IDAHO-WYOMING BORDER, WITH NOTES ON THE GEOLOGY. By C. L. Berger. *U. S. G. S., Bull.* 430, p. 555. 15 pages. 1909.

DEPOSITS OF SODIUM SALTS IN WYOMING. By A. R. Schultz. U. S. G. S., Bull. 430, p. 570. 19 pages. I. 1909.

Occurrence of Sulphur

A NEW SOURCE OF SUPPLY OF SULPHUR. T. A. I. M. E., vol. 39, p. 522. 18 pages. I.

MAKUSHIN SULPHUR DEPOSITS, UNALASKA. By N. O. Lawton. Min. & Sci. Press, vol. 98, p. 258. 4 columns. I.

SULPHUR MINING IN MEXICO. By E. F. White. M. & M., vol. 30, p. 75. 3½ columns. I.

THE SULPHUR DEPOSITS OF MAPIMI, MEXICO. By J. D. Villarello. T. I. M. E., vol. 37, p. 676. 2 pages.

SULPHUR IN THE NEW HEBRIDES ISLANDS. E. & M. J., vol. 87, p. 958. ½ column.

A NEW SOURCE OF SUPPLY OF SULPHUR. T. A. I. M. E., vol. 39, p. 522. 18 pages. I.

THE COVE CREEK SULPHUR BEDS, UTAH. By W. T. Lee. U. S. G. S., Bull. 315, p. 485. 5 pages. 1906.

SULPHUR DEPOSITS NEAR THERMOPOLIS, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 380, p. 373. 8 pages. I. 1908.

SULPHUR DEPOSITS AT CODY, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 340, p. 451. 6 pages. I. 1907.

Occurrence of Silver, Cobalt, Etc.

SILVER: History and Mode of Occurrence. By T. F. Van Wagenen. Min. & Sci. Press, vol. 97, p. 392. 7½ columns.

A SILVER BEARING DIORITE IN SOUTHERN ARIZONA. By J. Bond. E. & M. J., vol. 89, p. 1268. 4 columns.

BROKEN HILL SILVER MINE. By E. C. Andrews. Min. & Sci. Press, vol. 98, p. 158. 2 columns.

ORE DEPOSITS OF THE PEAKS SILVER FIELD, NEW SOUTH WALES. By C. O. G. Larcombe. T. A. I. M. E., vol. 11, p. 128. 8 pages. I.

OCCURRENCE OF SILVER-LEAD ORES AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 420. 1½ columns. I.

THE SILVER VEINS OF THE MONTREAL RIVER DISTRICT, CANADA. By A. E. Barlow. Min. & Sci. Press, vol. 97, p. 462. 6½ columns.

MINING AT COBALT. By F. C. Loring. E. & M. J., vol. 85, p. 905. 4 columns.

MINING AT COBALT. By F. C. Loring. J. C. M. I., vol. 11, p. 335. 5 pages.

OCCURRENCE OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO. J. C. M. I., vol. 11, p. 275. 12 pages.

THE COBALT MINING DISTRICT. By R. Bell. J. C. M. I., vol. 10, p. 62. 10 pages.

THE ORE DEPOSITS OF THE COBALT DISTRICT, ONTARIO, CANADA. By C. R. Van Hise. J. C. M. I., vol. 10, p. 45. 16 pages.

THE PROBABLE NUMBER OF PRODUCTIVE VEINS IN THE COBALT DISTRICT. By G. R. Mickle. J. C. M. I., vol. 13, p. 325. 12 pages.

THE PRESENT POSITION OF COBALT, CANADA. By H. P. Davis. E. & M. J., vol. 86, p. 855. 5 columns. I.

THE COBALT SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 86, p. 518. 2½ columns.

COBALT, ONTARIO, CANADA. By H. B. Smith. Min. & Sci. Press, vol. 96, p. 876. 5½ columns. I.

COBALT, ONTARIO, CANADA. By F. C. Loring. Min. & Sci. Press, vol. 95, p. 814. 2½ columns. I.

OPERATIONS IN THE COBALT DISTRICT, ONTARIO. By E. Higgins. E. & M. J., vol. 87, p. 1267. 14 columns. I.

THE COBALT DISTRICT IN 1909. By R. E. Hore. E. & M. J., vol. 89, p. 703. 4 columns. I.

- THE SOUTH LORRAINE SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 87, p. 214. 4 columns.
- THE SILVER ISLET VEIN, LAKE SUPERIOR. By W. McDermott. T. I. M. & M., vol. 18, p. 220. 34½ pages.
- OCCURRENCE OF ORE IN SILVER ISLET MINE. T. I. M. & M., vol. 18, p. 222. 4 pages.
- SILVER-LEAD MINES OF BAWDWIN, SHAN STATES, CHINA. By T. D. La Touche and J. C. Brown. E. & M. J., vol. 88, p. 550. 16½ columns. I.
- SILVER-LEAD MINING IN FREIBERG, GERMANY. By W. G. Brown. E. & M. J., vol. 87, p. 987. 5½ columns.
- THE SILVER MINES OF MEXICO. By A. F. J. Bordeaux. T. A. I. M. E., vol. 39, p. 357. 11½ pages.
- THE MINERAL RESOURCES OF SONORA. By F. J. H. Merrill. Min. & Sci. Press, vol. 96, p. 33. 14 columns. I. Map.
- SAN JAVIER, AN OLD SILVER DISTRICT OF SONORA. By C. N. Nelson. E. & M. J., vol. 90, p. 660. 4 columns. Map.
- LAS CHISPAS MINES, SONORA, MEXICO. By B. E. Russell. E. & M. J., vol. 86, p. 1006. 6 columns. I.
- EL TIGRE MINE, MONTEZUMA DISTRICT, SONORA, MEXICO. By R. L. Herrick. M. & M., vol. 29, p. 483. 10 columns. I.
- ORES OF THE EL TIGRE MINE, SONORA, MEXICO. M. & M., vol. 29, p. 486. ¼ column.
- THE PROMONTORIO SILVER MINE, DURANGO, MEXICO. By F. C. Lincoln. T. A. I. M. E., vol. 38, p. 734. 16 pages. I.
- LORETO MINE AND THE PINGUICO DISTRICT, GUANAJUATO, MEXICO. By C. W. Botsford. E. & M. J., vol. 88, p. 650. 2½ columns. I.
- THE ZACATECAS DISTRICT AND ITS RELATION TO GUANAJUATO AND OTHER CAMPS. By C. W. Botsford. E. & M. J., vol. 87, p. 1227. 4 columns. I.
- NOTES ON GUANAJUATO. By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 83. 2½ columns. I.
- OPERATIONS OF GUANAJUATO DEVELOPMENT COMPANY. E. & M. J., vol. 88, p. 651. 10 columns. I.
- THE WORKING MINES OF GUANAJUATO. By C. T. Rice. E. & M. J., vol. 86, p. 806. 8 columns. I.
- HISTORY OF LA LUZ CAMP, GUANAJUATO, MEXICO. E. & M. J., vol. 88, p. 646. ¾ column.
- THE GUANAJUATO MINING DISTRICT, MEXICO. E. & M. J., vol. 90, p. 1310. 6 columns. I.
- GUANAJUATO, THE GREAT SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 669. 9½ columns. I.
- MINES OF AJUCHITLAN, QUERETARO, MEXICO. By S. J. Lewis. Min. & Sci. Press, vol. 100, p. 211. 8½ columns. I.
- THE MINES OF EL DOCTOR, MEXICO. By T. D. Murphy. Min. & Sci. Press, vol. 95, p. 241. 8½ columns. I.
- THE SILVER-LEAD MINES OF SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 207. 12 columns. I.
- ORE OF THE SANTA BARBARA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 208. 2 columns.
- LAS LAMENTOS MINE, CHIHUAHUA. E. & M. J., vol. 87, p. 489. 1 column.
- RECENT MINING DEVELOPMENTS IN CHIHUAHUA. By A. P. Rogers. E. & M. J., vol. 88, p. 681. 6½ columns. I.
- STORIES OF THE BATOPILAS MINES, CHIHUAHUA, MEXICO. By M. R. Lamb. E. & M. J., vol. 85, p. 689. 4½ columns. I.

- SANTA BARBARA MINE, CHIHUAHUA, MEXICO. M. & M., vol. 29, p. 369. 3 columns. I.
- NATIVE SILVER IN SOUTHWESTERN CHIHUAHUA, MEXICO. By W. M. Brodie. E. & M. J., vol. 89, p. 664. 5½ columns. I.
- TRAVELING IN WESTERN CHIHUAHUA, MEXICO. By F. H. Morley. E. & M. J., vol. 87, p. 706. 8½ columns.
- MINING IN NORTHERN SINALOA, MEXICO. By E. A. H. Tays. Min. & Sci. Press, vol. 99, p. 120. 3½ columns. Map.
- THE ANTIQUA OF REAL DE SIVIRIJOA, SINALOA. By E. A. H. Tays. E. & M. J., vol. 90, p. 1155. 5½ columns. I.
- THE SILVER-MINES OF MEXICO: Discussion of Paper of A. F. J. Bordeaux, vol. 39, p. 357.
T. A. I. M. E., vol. 40, p. 848. 5 pages.
- THE ZACUALPAN DISTRICT, MEXICO. By J. M. Platt. E. & M. J., vol. 88, p. 670. 4 columns. I.
- THE SILVER MINE OF "JESUS MARIA," IN NEW LEON, MEXICO. Min. Mag., vol. 1, p. 570, 11½ pages; p. 34, 14 pages.
- MINES OF PENOLES COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 309. 13½ columns. I.
- PACHUCA AND REAL DEL MONTO SILVER DISTRICT, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 519. 17 columns. I.
- SOME REMINISCENCES OF OLD DOLORES, MEXICO. By V. Pender. E. & M. J., vol. 89, p. 1329. 6 columns.
- DIENTE, MEXICO. By E. McCormick. Min. & Sci. Press, vol. 95, p. 648. 1 column.
- ZACATECAS, A FAMOUS SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 401. 15½ columns. I.
- THE SILVER OF THE LAKE SUPERIOR MINERAL REGION. Min. Mag., vol. 1, p. 447, 8 pages; p. 612, ½ page.
- THE CORBINE DISTRICT, JEFFERSON COUNTY, MONTANA. By F. Bushnell. E. & M. J., vol. 89, p. 1154. 5½ columns. I.
- THE SILVER-LEAD DEPOSITS OF EUREKA, NEVADA. E. & M. J., vol. 85, p. 123. 3 columns.
- THE COMSTOCK MINES TODAY. By W. Symmes. Min. & Sci. Press, vol. 99, p. 24. 4½ columns. I.
- PROGRESS ON THE COMSTOCK LODGE. By R. L. Herrick. M. & M., vol. 29, p. 150. 10½ columns. I.
- THE GREAT COMSTOCK LODGE. By G. McM. Ross. Min. & Sci. Press, vol. 95, p. 468. 4 columns.
- GEOLOGY AND MINERAL RESOURCES OF THE OSCEOLA MINING DISTRICT, WHITE PINE COUNTY, NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 117. 18 pages. I. 1907.
- THE YELLOW PINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- NOTES ON THE PIOCHE MINING DISTRICT, NEVADA. By S. F. Shaw. E. & M. J., vol. 88, p. 545. 10½ columns. I.
- PIOCHE, NEVADA. By J. W. Abbott. Min. & Sci. Press, vol. 95, p. 176. 4 columns. I.
- HORNSILVER DISTRICT, NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 433. 2 columns.
- THE HORNSILVER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 41. 3 pages. 1908.
- GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER DEPOSITS. By C. R. Keyes. T. A. I. M. E., vol. 39, p. 139. 30½ pages. I.
- THE PRESIDIO SILVER MINES, SHAFER, TEXAS. By M. P. Kirk. E. & M. J., vol. 88, p. 818. 4½ columns. I.

SHAFTER SILVER DISTRICT, PRESIDIO COUNTY, TEXAS. By W. B. Phillips. E. & M. J., vol. 90, p. 1303. 6½ columns. I.

SILVER-LEAD MINES OF THE UNITED STATES. E. & M. J., vol. 85, p. 374. 1 column.

PARK CITY, UTAH. Min. & Sci. Press, vol. 100, p. 793. 4 columns. I.

THE GRAN PROBRE SILVER MINE IN VENEZUELA. By C. Kissler. Min Mag., vol. 2, p. 121. 4 pages.

Occurrence of Tin

BIBLIOGRAPHY OF TIN-DEPOSITS IN NORTH AMERICA. T. A. I. M. E., vol. 38, p. 682. 1 page.

See also UNITED STATES.

NIGERIAN TIN MINING. E. & M. J., vol. 90, p. 1299. ½ column.

TIN DEPOSITS OF THE TRANSVAAL. E. & M. J., vol. 88, p. 778. 2½ columns.

TIN MINING AND ORE DRESSING IN SOUTH AFRICA. By E. M. Weston. E. & M. J., vol. 89, p. 411, 7½ columns, I.; p. 470, 7 columns, I.; p. 573, 7 columns, I.

TIN IN THE BELGIAN CONGO. T. A. I. M. E., vol. 41, p. 209. 2 pages. I.

THE GROENFONTEIN TIN MINES. By E. M. Weston. E. & M. J., vol. 90, p. 515. ½ column. I.

THE SOUTH AFRICAN TIN DEPOSITS. By W. R. Rumbold. T. A. I. M. E., vol. 39, p. 783. 7 pages. I.

TIN MINING IN CAPE COLONY. By H. D. Griffiths. P. C. M. & M., Soc. S. A., vol. 8, p. 167. 28 columns. I.

RECENT DEVELOPMENT OF ALASKAN TIN DEPOSITS. By A. J. Collier. U. S. G. S., Bull. 259, p. 120. 7½ pages. I.

TIN IN YORK REGION, ALASKA. By A. H. Brooks. U. S. G. S., Mineral Resources, 1900.

GEOLOGY OF THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 358. 72 pages. I. 1908.

THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 345, p. 251. 18 pages. I. 1907.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. T. A. I. M. E., vol. 38, p. 669. 9 pages. I.

OCCURRENCE OF WOLFRAMITE AND CASSITERITE IN THE GOLD PLACERS OF DEADWOOD CREEK, BIRCH CREEK DISTRICT, ALASKA. By B. L. Johnson. U. S. G. S., Bull. 442, p. 246. 5 pages. 1909.

TIN MINING AND MILLING IN NORTH QUEENSLAND. By G. W. Williams. E. & M. J., vol. 87, p. 1092. 6½ columns.

THE NORTH DUNDAS TIN DISTRICT. By J. M. Bell. Min. Mag., London, vol. 4, p. 59. 4 columns. Map.

TIN MINING IN BOLIVIA. By W. R. Rumbold. Min. Mag., London, vol. 2, p. 451. 6 columns. I.

TIN MINING IN BOLIVIA. By W. Gray and A. L. Halden. Min. Mag., London, vol. 3, p. 203. 6 columns. I.

THE CHOROLQUE TIN DISTRICT, BOLIVIA. Min. Mag., London, vol. 4, p. 213. 6 columns. I. D.

TIN DEPOSITS OF THE CAROLINAS. By S. M. Ball. E. & M. J., vol. 87, p. 1130. 2½ columns.

TIN PRODUCTION IN THE PROVINCE OF YUNNAN, CHINA. By W. F. Collins. T. I. M. & M., vol. 19, p. 187. 24 pages. I.

OCCURRENCE OF TIN IN THE PROVINCE OF YUNNAN, CHINA. T. I. M. & M., vol. 19, p. 188. ½ page.

TIN, TUNGSTEN, AND TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

MINING IN THE MALAY STATES. By E. S. Marks. Min. & Sci. Press, vol. 98, p. 31. 10½ columns. I.

TIN MINING IN ULN GELANGOR, FEDERATED MALAY STATES. By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.

MINING LODE TIN IN MALAYA. E. & M. J., vol. 86, p. 371. 4 columns.

THE RED RIVER, CORNWALL, ENGLAND. By E. Walker. Min. & Sci. Press, vol. 97, p. 849. 2 columns.

A TIN DEPOSIT NEAR SPOKANE. By A. R. Whitman. Min. & Sci. Press, vol. 95, p. 49. 1½ columns. I.

THE CERRO DE PASCO MINING DISTRICT, PERU. By C. C. Sample. E. & M. J., vol. 85, p. 155. 11 columns. I.

TIN DEPOSITS OF TASMANIA. M. & M., vol. 31, p. 309. 4 columns. I.

NOTES ON THE ZEEHAN MINING FIELD, TASMANIA. By G. W. Williams. E. & M. J., vol. 89, p. 713. 7½ columns. I.

TIN MINING IN TASMANIA. By J. B. Lewis. E. & M. J., vol. 85, p. 485. 12½ columns. I.

MOUNT BISCHOFF OF TASMANIA. By F. H. Bathurst. Min. Mag., London, vol. 3, p. 195. 10 columns. I.

FRANKLIN MOUNTAIN TIN PROSPECTS. By R. Chauvenet. M. & M., vol. 30, p. 529. 4½ columns.

TIN DEPOSITS OF THE SOUTHERN APALACHIANS. By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.

See also MISCELLANEOUS DISTRICTS.

TIN ORE AT SPOKANE, WASHINGTON. By A. J. Collier. U. S. G. S., Bull. 340, p. 295. 12 pages. I. 1907.

See also THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.

Occurrence of Tungsten

TUNGSTEN: Its Occurrence and Use. M. & M., vol. 30, p. 387. ¼ column.

RARE METALS: Tungsten. By C. Baskerville. E. & M. J., vol. 87, p. 203. 2½ columns.

NOTES ON THE OCCURRENCE OF TUNGSTEN MINERALS NEAR CALABASAS, ARIZONA. By J. M. Hill. U. S. G. S., Bull. 430, p. 164. 3 pages.

A TUNGSTEN DEPOSIT IN WESTERN ARIZONA. E. & M. J., vol. 90, p. 1103. ¼ column.

OCCURRENCE OF TUNGSTEN IN RAND DISTRICT, CALIFORNIA. By S. A. Dolbear. E. & M. J., vol. 90, p. 904. 4½ columns.

TUNGSTEN MINING IN CALIFORNIA. E. & M. J., vol. 86, p. 573. 2 columns. I.

THE TUNGSTEN ORES OF CANADA. E. & M. J., vol. 88, p. 729. 2½ columns.

TUNGSTEN AND THE MOOSE RIVER SCHEELITE VEINS. By A. A. Hayward. J. M. Soc. N. S., vol. 15, p. 65. 14 pages.

THE OCCURRENCE OF TUNGSTEN ORE IN CANADA. By T. L. Walker. J. C. M. I., vol. 11, p. 367. 4½ pages.

TUNGSTEN INDUSTRY OF BOULDER COUNTY, COLORADO, IN 1908. By R. D. George. E. & M. J., vol. 87, p. 1055. 2 columns. Map.

TUNGSTEN IN SAN JUAN COUNTY, COLORADO. By W. C. Prosser. E. & M. J., vol. 90, p. 320. 2 columns. I.

TUNGSTEN DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

TUNGSTEN ORE DEPOSITS OF THE CŒUR D'ALENE. By H. S. Auerbach. E. & M. J., vol. 86, p. 1146. 6½ columns. I.

TUNGSTEN DEPOSITS IN THE SNAKE RANGE, WHITE PINE COUNTY, EAST-

ERN NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 263. 7 pages. I. 1907.

STRUCTURE OF THE TUNGSTEN DEPOSITS OF MOOSE RIVER, NOVA SCOTIA. By E. R. Faribault. J. M. Soc. N. S., vol. 15, p. 59. 6 pages.

TUNGSTEN ORE IN WASHINGTON. By A. Wolf. M. & M., vol. 31, p. 307. 2 columns.

NOTES ON TUNGSTEN DEPOSITS NEAR DEER PARK, WASHINGTON. By H. Bancroft. U. S. G. S., Bull. 430, p. 214. 3 pages. 1909.

Occurrence of Wolframite

NOTE ON A WOLFRAMITE DEPOSIT IN THE WHEATSTONE MOUNTAINS, ARIZONA. By F. L. Hess. U. S. G. S., Bull. 380, p. 164. 2 pages. 1908.

HANDLING AND STORAGE OF MINERAL

Methods of Handling Mineral and Coal

MATERIAL-HANDLING MACHINERY AND ITS EVOLUTION. By E. H. Messiter. Min. & Sci. Press, vol. 101, p. 138. 3½ columns. D.

MINE CAR CAGING MACHINE. M. & M., vol. 31, p. 413. 1 column. I.

HANDLING COAL ON THE TIPPLE AT THE CRESCENT MINE NEAR CALIFORNIA, PENNSYLVANIA. E. & M. J., vol. 89, p. 328. 2 columns. I.

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THE MUCKING PROBLEM IN TUNNELS. By R. L. Herrick. M. & M., vol. 30, p. 98. 2 columns. I.

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METHODS OF ORE HANDLING AT THE RICHARDSON MINES, GUYSBOROUGH COUNTY, NOVA SCOTIA. By H. S. Badger. J. M. Soc. N. S., vol. 13, p. 83. 18 pages. I.

HANDLING ORE IN THE QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 407. 5 pages. I.

HANDLING COAL UNDERGROUND IN THE CAPE BRETON ISLAND MINES. J. C. M. I., vol. 13, p. 648. 2 pages. I.

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FINGER CHUTES. By C. A. Chase. Min. & Sci. Press, vol. 98, p. 315. 2 columns. I.

THE FINGER CHUTE. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 538. 4½ columns. I.

FINGER CHUTE FOR FILLING WHEEL-BARROWS. E. & M. J., vol. 88, p. 1130. 1 column. I.

THE CHINAMAN CHUTE. T. I. M. & M., vol. 18, p. 294, 1 page, I.; p. 310, 1½ pages.

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THE "CHINAMAN" ORE CHUTE. Min. & Sci. Press, vol. 96, p. 667. ½ column. I.

THE "CHINAMAN" ORE CHUTE. E. & M. J., vol. 88, p. 472. 1 column. I.

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RICHARDSON AUTOMATIC WEIGHING MACHINE. Min. & Sci. Press, vol. 95, p. 788. 2 columns. I.

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TAILINGS ELEVATORS ON THE RAND. By E. M. Weston. E. & M. J., vol. 86, p. 539. 2 columns. I.

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DESCRIPTION OF ELECTRIC-HAULAGE PLANT IN OPERATION IN No. 5 COLLIERY, SYDNEY MINES, NOVA SCOTIA. By R. Robertson. J. M. Soc. N. S., vol. 15, p. 93. 9½ pages. I.

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STEEL CAR FOR COAL MINES: Details of Construction. E. & M. J., vol. 89, p. 451. $\frac{1}{2}$ column. I.

A HANDY CAR. By E. McCormick. Min. & Sci. Press, vol. 96, p. 321. 1 column. I.

CŒUR D'ALENE MINE CAR. E. & M. J., vol. 89, p. 1312. 1 column. I.

OHIO COPPER COMPANY'S SAFETY CARS: Man Car. M. & M., vol. 30, p. 369. $1\frac{1}{2}$ columns. I.

A COMPOSITE MINE CAR. By W. A. Weldin. M. & M., vol. 30, p. 436. $4\frac{1}{2}$ columns. I.

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SIDE DUMP MINE CAR. By C. T. Rice. E. & M. J., vol. 90, p. 1197. $1\frac{1}{2}$ columns. I.

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- CO-OPERATIVE COAL MINING.** E. & M. J., vol. 88, p. 780. 2 columns.
- CO-OPERATION IN MINING AND GEOLOGY.** By U. S. Grant. Min. & Sci. Press, vol. 96, p. 333. 2 columns.
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- LABOR ON THE RAND.** T. A. I. M. E., vol. 39, p. 218. $5\frac{1}{2}$ pages.
- LABOR ON THE RAND.** P. C. M. & M. Soc. S. A., vol. 8, p. 265. 2 columns.
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- MEXICAN LABOR.** Min. & Sci. Press, vol. 95, p. 83. 1 column.
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- HUMIDITY, ITS NECESSITY AND BENEFITS.** By W. W. Brand. Heating and Ventilating Magazine, July, 1910.
- PROTECTIVE VALUE OF HUMIDITY.** By J. Ashworth. M. & M., vol. 31, p. 108. $3\frac{1}{2}$ columns.
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- UNDERGROUND HUMIDITY IN THE COMSTOCK MINES, NEVADA.** T. A. I. M. E., vol. 41, p. 43. 4 pages. D.
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- EFFECT ON WORKMEN OF HIGH TEMPERATURE AND HUMIDITY.** T. A. I. M. E., vol. 41, p. 50. 3 pages.
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Stocks and Stockholders

VALUE OF MINING STOCK. By M. L. Requa. Min. & Sci. Press, vol. 96, p. 329. 4 columns.

VALUE OF MINING STOCK. Min. & Sci. Press, vol. 96, p. 699. 2½ columns.

STOCK COMPANIES AND COMPANY PROMOTION. By H. A. Butters. Min. & Sci. Press, vol. 96, p. 597. 11 columns.

THE PSYCHOLOGY OF A "BULL MARKET." E. & M. J., vol. 87, p. 1247. 1 column.

MINING IN WALL STREET. Min. Mag., vol. 4, p. 370. 6 pages.

NEW YORK'S OPEN-AIR STOCK MARKET. By W. T. Royce. E. & M. J., vol. 87, p. 356. 8½ columns. I.

Mine Investment

INVESTMENTS AND SPECULATIONS. Min. Mag., London, vol. 1, p. 39, 8 columns; p. 285, 6 columns.

LEGITIMATE MINING: Its Character. Min. Mag., vol. 5, p. 103. 10 pages.

IS MINING A LEGITIMATE BUSINESS? MINES AS A MEANS OF INVESTMENT. Min. Mag., vol. 10, p. 374. 2½ pages.

COMPARATIVE MERITS OF COAL MINING INVESTMENTS. By F. W. Parsons. E. & M. J., vol. 90, p. 32. 1 column.

COAL MINING AS AN INVESTMENT. By H. M. Chance. E. & M. J., vol. 88, p. 316. 5½ columns.

THE SAFETY OF JUDICIOUS MINING INVESTMENTS. By J. P. Channing. E. & M. J., vol. 89, p. 211. 9 columns.

SUGGESTIONS REGARDING MINING INVESTMENTS. By J. H. Hammond. E. & M. J., vol. 89, p. 8. 9½ columns.

MINE INVESTMENTS. By G. D. Stonestreet. E. & M. J., vol. 87, p. 1193. 2 columns.

PROSPECTUSES: Defined. By F. D. Power. T. Au. I. M. E., vol. 10, p. 1. 26 pages.

VALUATION OF MINING SHARES. By Newton B. Knox. Min. & Sci. Press, vol. 96, p. 733. 2½ columns; p. 771, 3 columns.

See also **VALUE OF MINES, ETC.**

HOW TO SELL A MINE. E. & M. J., vol. 86, p. 537, 3 columns.

MINING INVESTORS, MINE OWNERS, MINING ENGINEERS, MINE MANAGERS AND MINERS. By J. O. James. J. M. Soc. N. S., vol. 10, p. 170. 4 pages.

PROTECTING INVESTORS BY EXPOSING MINING FRAUDS. By C. S. Thomas, Jr. E. & M. J., vol. 90, p. 1157. 9½ columns.

BETTER PROTECTION OF MINE INVESTORS. By H. S. Munroe. Min. & Sci. Press, vol. 97, p. 600. 7½ columns.

PROTECTION OF MEXICAN INVESTORS. By F. J. H. Merrill. Min. & Sci. Press, vol. 98, p. 490. 4½ columns.

OPTIONS IN TRANSACTION OF MINING. E. & M. J., vol. 86, p. 571. 1½ columns.

"WASH SALES" OF STOCK. Min. & Sci. Press, vol. 97, p. 442. 1 column.

See also **DEFINITIONS AND TERMS.**

Mining Risks and Frauds

RISK IN MINING: Investment in Mining Properties. Min. & Sci. Press, vol. 100, p. 210. 2 columns.

MINING SWINDLES. Min. & Sci. Press, vol. 22, p. 136. 1 column.

See also **SALTING OF MINES.**

Rating and Taxation of Mining Property

MINE TAXATION. J. C. M. I., vol. 13, p. 12. 1 page.

OWNERSHIP AND TAXATION OF MINING CLAIMS. By W. Greenwood. E. & M. J., vol. 88, p. 129. 1½ columns.

TAXING "UNGOTTEN MINERALS." E. & M. J., vol. 88, p. 159. ¼ column.

TAXATION OF MINING PROPERTIES. By H. W. Turner. Min. & Sci. Press, vol. 98, p. 46. 1 column.

MINE TAXES IN CALIFORNIA. E. & M. J., vol. 86, p. 1156. ¼ column.

THE CORPORATION TAX ON MINING COMPANIES. E. & M. J., vol. 89, p. 254. 1 column.

MINE TAXES IN MEXICO. E. & M. J., vol. 89, p. 417. 1 column.

DRAWBACK REGULATIONS ON MINERALS. E. & M. J., vol. 87, p. 261. ¼ column.

DRAWBACK ON ZINC SHAVINGS. E. & M. J., vol. 87, p. 302. ¼ column.

DUTY ON ZINC ORES. E. & M. J., vol. 87, p. 461. ¾ column.

THE TARIFF ON IRON ORE. By H. O. Young. T. L. S. M. I., vol. 14, p. 179. 14½ pages.

See also **CLAIMS, TAXES, ASSESSMENTS, ROYALTIES, CHARGES, ETC.**

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Maps of Countries and Districts

FORMULAS AND TABLES TO FACILITATE THE CONSTRUCTION AND USE OF MAPS. By R. S. Woodward. U. S. G. S., Bull. 50. 124 pages. 1889.

THE INTERPRETATION OF TOPOGRAPHIC MAPS. By R. D. Salisbury and W. W. Atwood. U. S. G. S., Professional Paper 61. 96 pages. 1. 1909.

SYSTEM OF MAP-FILING. By G. N. Pfeiffer. Min. & Sci. Press, vol. 95, p. 584. 1½ columns. D.

See also SYSTEM OF KEEPING MINING NOTES, ETC.

MAPOTICA GEOLOGICA AMERICA: A Catalogue of Geological Maps of America. By J. Marcou and J. B. Marcou. U. S. G. S., Bull. 7. 184 pages. 1884.

MAP OF THE COAL FIELDS OF ILLINOIS. T. A. I. M. E., vol. 40, p. 8. 1 page. I.

MAPS OF THE ANTHRACITE COAL FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, pp. 8, 9, and 10.

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- ASSAY OF GOLD TELLURIDE ORE. E. & M. J., vol. 85, p. 1304. 1½ columns.
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- WET ASSAY OF TIN ORES. P. C. M. & M. Soc. S. A., vol. 10, p. 376. 2 columns.
- WET ASSAY FOR VANADIUM ORES. E. & M. J., vol. 90, p. 79. ½ column.
- See also DEFINITIONS AND TERMS.
- See also WEIGHTS AND MEASURES and CONCENTRATION.

Metallurgy of Copper

- COPPER SMELTING: The Process as Practiced at the Hafod Works, Swansea. Min. Mag., vol. 10, p. 33. 5 pages.
- COPPER SMELTING. By H. M. Howe. U. S. G. S., Bull. 26. 107 pages. 1885.
- THE MINING AND METALLURGY OF COPPER, SILVER, LEAD AND ZINC. By F. W. Sewell. T. A. I. M. E., vol. 12, p. 105. 26 pages. I. D.
- LABORATORY ROUTINE IN MODERN COPPER SMELTERS. By H. T. Waller. T. I. M. & M., vol. 18, p. 37. 22 pages.
- COPPER IN CHLORIDE SOLUTIONS. By G. Fernekes. Min. & Sci. Press, vol. 95, p. 592. 2½ columns.
- MOISTURE IN COPPER BULLION. By D. M. Liddell. E. & M. J., vol. 90, p. 1095. 3½ columns.
- THE BEHAVIOR OF COPPER-SLAGS IN THE ELECTRIC FURNACE. By L. T. Wright. T. A. I. M. E., vol. 41, p. 316. 1½ pages.
- THE GREENAWALT ELECTROLYTIC PROCESS. By W. E. Greenawalt. E. & M. J., vol. 90, p. 1062. 12½ columns. I.
- SECTIONAL SLAG POT. By E. C. Ruder. M. & M., vol. 31, p. 149. ½ column. I.
- THE KILKER MATTE TAPPING CAR. By F. T. Havard. E. & M. J., vol. 87, p. 1294. 3 columns. I.
- SLAG CAR USED AT THE CANANEA SMELTING WORKS. By C. F. Shelby. E. & M. J., vol. 87, p. 204. 3 columns. I.

- A MATTE-SEPARATING FOREHEARTH.** By E. Jacobs. E. & M. J., vol. 87, p. 1232. 2 columns. I.
- MATTE SMELTING AT DENVER.** By H. F. Bain. Min. & Sci. Press, vol. 100, p. 250. 8 columns. I.
- KELLEY SLAG AND MATTE CASTING MACHINE.** By F. G. Kelley. E. & M. J., vol. 86, p. 610. 4 columns. I.
- MATTE SMELTING AT INGOT, CALIFORNIA.** By W. B. Bretherton. E. & M. J., vol. 85, p. 443. 6 columns. I.
- METHOD OF HANDLING MATTE AT SELBY, CALIFORNIA.** By J. C. Bennett. E. & M. J., vol. 85, p. 252. 4 columns. I.
- THE CONSTITUTION OF COPPER-IRON AND COPPER-LEAD-IRON MATTES.** By C. A. Fulton and I. E. Goodner. T. A. I. M. E., vol. 39, p. 584. 35½ pages. I.
- THE PRODUCTION OF CONVERTER-MATTE FROM COPPER-CONCENTRATES BY POT-ROASTING AND SMELTING.** By E. A. Packard. T. A. I. M. E., vol. 38, p. 633. 4½ pages.
- THE CONSTITUTION OF MATTES PRODUCED IN COPPER-SMELTING: Discussion of A. Gibb's and R. C. Philp's Paper.** T. A. I. M. E., vol. 38, p. 913. 2½ pages.
- SINTERING OF COPPER ORES.** By W. G. Perkins. Min. Mag., London, vol. 2, p. 209. 6½ columns.
- SINTERING OF COPPER ORES IN SPAIN.** By H. F. Collins. Min. Mag., London, vol. 1, p. 52. 6 columns. I.
- METAL LOSSES WITH ORE OF LOW COPPER CONTENT.** By C. A. Heberlein. E. & M. J., vol. 89, p. 617. 2½ columns.
- METAL LOSSES IN COPPER SLAGS.** By N. M. Zoph. Min. & Sci. Press, vol. 100, p. 261. 2 columns.
- METAL LOSSES IN COPPER SLAGS.** By L. T. Wright. T. A. I. M. E., vol. 40, p. 492. 4 pages. D.
- NOTES ON THE METAL LOSSES IN COPPER SLAGS.** By C. A. Grabill. E. & M. J., vol. 89, p. 776. 9½ columns. D.
- ALLOYS OF COPPER: German Silver, Bronze Ordnance, or Common Metal—Bell Metal.** Min. Mag., vol. 10, p. 197. 16 pages.
- COPPER FOR THE FOUNDRY.** By F. L. Antisell. E. & M. J., vol. 86, p. 225. 3 columns.
- THE INFLUENCE OF BISMUTH ON WIRE-BAR COPPER.** By H. N. Lawrie. T. A. I. M. E., vol. 40, p. 604. 10 pages. I.
- THE INFLUENCE OF BISMUTH ON WIRE BAR COPPER.** By H. N. Lawrie. T. A. I. M. E., vol. 40, p. 604. 10 pages. I.
- THE CONSTITUTION OF FERRO-CUPROUS SULPHIDES.** By H. O. Hofman, W. S. Cayless and E. E. Harrington. T. A. I. M. E., vol. 36, p. 142. 12 pages. I.
- THE NEILL PROCESS AT COCONINO, ARIZONA.** By J. W. Neill. E. & M. J., vol. 85, p. 556. 2½ columns.
- THE NEILL PROCESS AT COCONINO, ARIZONA: Leaching with Sulphur Dioxide.** E. & M. J., vol. 85, p. 152. 1½ columns.
- THE JUMAN COPPER LEACHING PROCESS.** E. & M. J., vol. 86, p. 132. 1½ columns.
- COPPER LEACHING PLANT IN THE URAL MOUNTAINS.** By A. L. Simon. T. I. M. & M., vol. 19, p. 212, 30 pages, I.; p. 244, 18 pages.
- PRECIPITATION OF COPPER FROM BUTTE MINE WATER.** By C. J. Stose. E. & M. J., vol. 87, p. 953. 5½ columns. I.
- COPPER LEACHING IN THE URAL MOUNTAINS.** E. & M. J., vol. 89, p. 461. 1½ columns.
- PRECIPITATION OF COPPER FROM CUPIFEROUS WATERS.** By F. H. Probert. Min. & Sci. Press, vol. 96, p. 27. 5½ columns. I.

- A COPPER PRECIPITATING PLANT. By H. W. Chittenden. E. & M. J., vol. 86, p. 853. 4½ columns.
- THE OUTLOOK FOR HYDROMETALLURGY OF COPPER. By W. E. Greenawalt. E. & M. J., vol. 90, p. 960. 9 columns.
- CONSTRUCTION OF 100-TON COPPER SMELTING PLANT. By C. C. Christensen. E. & M. J., vol. 86, p. 847. 10½ columns.
- THE WASHOE REDUCTION WORKS. M. & M., vol. 30, p. 520. 6½ columns. I.
- THE GREAT COBAR SMELTING WORKS. E. & M. J., vol. 85, p. 950. 15½ columns. I.
- WALLEROO AND MOONTA COPPER MINES AND SMELTERY. By G. W. Williams. E. & M. J., vol. 88, p. 54. 14½ columns. I.
- SMELTING WORKS OF TEZINTLAN COPPER COMPANY. By A. van Zwallowenburg. E. & M. J., vol. 90, p. 169. 10 columns. I.
- COPPER SMELTING IN SIBERIA. By W. A. Heywood. Min. & Sci. Press, vol. 97, p. 59. 1 column.
- COPPER SMELTING IN THE ARGENTINE. By C. H. Jones. Min. Mag., London, vol. 1, p. 123. 12½ columns. I.
- COPPER SMELTING IN QUEENSLAND, AUSTRALIA. E. & M. J., vol. 87, p. 605. 2 columns.
- THE SMELTER OF THE MAMMOTH COPPER MINING COMPANY, AT KENNETT, CALIFORNIA. By D. F. Campbell. Min. & Sci. Press, vol. 96, p. 30. 3½ columns. I.
- SMELTING COPPER ORES IN SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 396. 6 columns. I.
- THE GRANBY SMELTER EQUIPMENT. By B. L. Sackett. M. & M., vol. 30, p. 524. 8½ columns. I.
- THE GRANBY SMELTER. By R. Keffer. Min. & Sci. Press, vol. 98, p. 256. 3½ columns. I.
- RECENT DEVELOPMENTS AT THE GRANBY SMELTER. By F. E. Lathe. J. C. M. I., vol. 13, p. 273. 15 pages. I.
- CANANEA ORE-BEDDING SYSTEM. By R. L. Herrick. M. & M., vol. 30, p. 65. 9½ columns. I.
- CANANEA FURNACE PRACTICE. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 9. 6½ columns. I.
- COPPER-GOLD SMELTING AT MAGISTRAL, MEXICO. By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE DOUGLAS COPPER SMELTER AT FUNDICION, MEXICO. By P. E. Barbour. E. & M. J., vol. 85, p. 303. 9 columns. I.
- DOUGLAS SMELTING WORKS, FUNDICION, SONORA. By W. P. Tucker. E. & M. J., vol. 86, p. 413. 4½ columns. I.
- PRESENT CONDITION OF THE GARFIELD SMELTING WORKS. By L. S. Austin. Min. & Sci. Press, vol. 99, p. 590. 2½ columns.
- SMELTING PLANT OF THE BUTTE REDUCTION WORKS. By A. H. Wethey. E. & M. J., vol. 88, p. 1153. 7 columns. I.
- THE SMELTERS AT ANACONDA. By E. P. Mathewson. E. & M. J., vol. 86, p. 130. 2 columns.
- THE TAKILMA SMELTER, OREGON. By Geo. Crevar. E. & M. J., vol. 85, p. 365. 1½ columns.
- MINING AND SMELTING AT CERRO DE PASCO, PERU. By C. C. Sample. E. & M. J., vol. 85, p. 206. 12 columns. I.
- SMELTING AT CERRO DE PASCO, PERU. By L. W. Strauss. Min. & Sci. Press, vol. 97, p. 637. 15½ columns. I.
- SMELTING WORKS AT RIO BLANCO, PERU. Min. & Sci. Press, vol. 97, p. 465. 2 columns. I.
- SMELTING AT NISHNI TAGIL IN THE URAL MOUNTAINS. By F. W. Draper. E. & M. J., vol. 90, p. 610. 9 columns.

- COPPER SMELTING IN TENNESSEE.** By J. P. Channing. Min. & Sci. Press, vol. 96, p. 97. 1½ columns.
- MINING AND SMELTING IN THE DUCKTOWN DISTRICT.** By E. Higgins. E. & M. J., vol. 86, p. 1237. 12½ columns. I.
- NOTES ON THE METALLURGY AT COPPERHILL, TENNESSEE.** By G. A. Guess. E. & M. J., vol. 90, p. 866. 2½ columns.
- THE TINTIC SMELTER.** By L. A. Palmer. M. & M., vol. 29, p. 535. 3½ columns. I.
- THE TYEE SMELTER.** By R. L. Phelps. Min. & Sci. Press, vol. 95, p. 782. 3½ columns. I.
- SMELTING PRACTICE OF THE TYEE COPPER COMPANY.** By G. W. Maynard. E. & M. J., vol. 88, p. 905. 11½ columns. I.
- YAMPA SMELTER, BINGHAM, UTAH.** By L. A. Palmer. Min. & Sci. Press, vol. 99, p. 225. 6½ columns. I.
- THE YAMPA SMELTER AT BINGHAM, UTAH.** By L. A. Palmer. M. & M., vol. 31, p. 14. 8½ columns. I.
- THE INTERNATIONAL SMELTERY AT TOOELE, UTAH.** E. & M. J., vol. 90, p. 1059. 6½ columns. I.
- THE NEW INTERNATIONAL SMELTERY AT TOOELE, UTAH.** By J. Tyssowski. E. & M. J., vol. 89, p. 865. 7 columns. I.
- THE TOOELE SMELTER.** By C. M. Gregory. M. & M., vol. 31, p. 321. 5½ columns. I.
- NOTES ON COPPER SMELTING IN THE WEST.** By E. D. Peters. E. & M. J., vol. 88, p. 735. 4 columns.
- See also CONCENTRATION, and THE COPPER TRADE, also COST OF METALLURGICAL TREATMENT.
- Blast Furnace Smelting of Copper**
- PRACTICAL BLAST FURNACE MANAGEMENT.** By Randolph Bolling. E. & M. J., vol. 85, p. 989. 8 columns. I.
- BLAST FURNACE PROGRESS.** By J. Birkinbine. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- A BLAST FURNACE OF OVAL SECTION.** E. & M. J., vol. 87, p. 853. 3½ columns. I.
- SOME MODIFICATIONS IN BLAST FURNACE CONSTRUCTION.** By J. Kennedy. P. E. Soc. W. Pa., vol. 23, p. 1. 14 pages. I.
- BLAST FURNACE STOCK-HANDLING AND CHARGING APPARATUS.** By W. H. Graham. J. M. Soc. N. S., vol. 15, p. 107. 4 pages. I.
- ON THE USE OF RAW COAL IN BLAST FURNACES.** Min. Mag., vol. 8, p. 1.
- TOPS OF COPPER BLAST FURNACES.** By N. H. Emmons. T. A. I. M. E., vol. 41, p. 723. 10 pages. I.
- CIRCULAR COPPER BLAST FURNACES.** By T. E. Lambert. M. & M., vol. 31, p. 20. 6½ columns. I.
- ALUMINA IN COPPER BLAST FURNACE SLAGS.** E. & M. J., vol. 86, p. 1262. 5 columns.
- ROLE OF ALUMINA IN COPPER BLAST FURNACE SLAGS.** By L. G. Smith. E. & M. J., vol. 90, p. 1260. 5½ columns.
- NEW COPPER BLAST FURNACES AT TEZINTLAN SMELTERY.** By C. Robinson. E. & M. J., vol. 88, p. 655. 4 columns. I.
- THE CHARGING OF BLAST FURNACES.** By E. H. Messiter. Min. & Sci. Press, vol. 95, p. 528. 8½ columns. I.
- BLAST FURNACES IN THE GRANBY SMELTER.** M. & M., vol. 30, p. 525. 2 columns. I.
- BLAST FURNACES AT THE YAMPA SMELTER, BINGHAM, UTAH.** M. & M., vol. 31, p. 16. 2½ columns.
- THE CANANEA BLAST FURNACE.** By C. F. Shelby. E. & M. J., vol. 85, p. 841. 16 columns. I.
- COPPER BLAST FURNACE SMELTING AT ANACONDA.** By C. Offerhaus. E. & M. J., vol. 88, p. 243. 19 columns. I.

THE CORROSION OF WATER-JACKETS OF COPPER BLAST FURNACES. By G. B. Lee. T. A. I. M. E., vol. 38, p. 877. 9 pages.

THE CORROSION OF WATER-JACKETS OF COPPER BLAST FURNACES: Discussion on the paper of G. B. Lee. Trans., vol. 388, p. 877.

T. A. I. M. E., vol. 39, p. 806. 10 pages.

See also **METALLURGY OF COPPER.**

Pyritic Smelting of Copper

THE DEVELOPMENT OF PYRITIC SMELTING. By R. C. Sticht. T. A. I. M. E., vol. 11, p. 1. 70 pages.

PYRITE SMELTING AND SULPHURIC ACID MANUFACTURE. By F. J. Felding and J. P. Channing. E. & M. J., vol. 90, p. 555. 10½ columns. D.

NEGATIVE RESULTS IN PYRITIC SMELTING. E. & M. J., vol. 85, p. 325. 4 columns; p. 373, 4½ columns.

PYRITE SMELTING BY KUNDSSEN METHOD IN NORWAY. By E. Kundsén. E. & M. J., vol. 87, p. 1080. 11½ columns. I.

KUNDSSEN PROCESS OF PYRITIC CONVERTER SMELTING. By O. Bergström. Min. & Sci. Press, vol. 98, p. 858. 2½ columns.

NOTES AND COMMENTS ON THE PYRITIC PROCESS OF MOUNT LYELL, TASMANIA. By R. Nicholls. P. C. M. & M. Soc. S. A., vol. 7, p. 135, 8 columns; p. 214, 4 columns; p. 290, 5 columns.

PYRITIC SMELTING IN LEADVILLE. By C. H. Doolittle and R. P. Jarvis. T. A. I. M. E., vol. 41, p. 709. 14 pages.

PYRITIC SMELTING IN TILT COVE, NEWFOUNDLAND. By F. S. Nicholls. E. & M. J., vol. 86, p. 462. 4½ columns. I.

Reverberatory Smelting of Copper

REVERBERATORY VS. BLAST FURNACES. By H. P. Collins. E. & M. J., vol. 89, p. 619. 2 columns.

REVERBERATORY COPPER SMELTING. By E. B. Wilson. M. & M., vol. 31, p. 557. 8½ columns. I.

REGENERATIVE REVERBERATORY COPPER FURNACE. By F. A. Leas. E. & M. J., vol. 86, p. 898. 8 columns. I.

THEORETICAL NOTES ON REVERBERATORY FURNACES. By C. A. Grabill. E. & M. J., vol. 89, p. 826. 8½ columns.

REVERBERATORY FURNACE PRACTICE. By W. A. Heywood. E. & M. J., vol. 89, p. 407. 1½ columns.

RECENT REVERBERATORY SMELTING PRACTICE. By R. R. Moore. E. & M. J., vol. 89, p. 1021, 10½ columns; p. 1063, 7½ columns.

REVERBERATORY FURNACE SMELTING OF ORES. By T. J. Dyson. T. A. I. M. E., vol. 5, p. 71. 4½ pages.

MAGNETIC OXIDE IN MATTE. By E. L. Larison. E. & M. J., vol. 87, p. 1195. 3 columns.

SMELTING COPPER IN SMALL REVERBERATORY FURNACES. By E. M. Clark. Min. & Sci. Press, vol. 100, p. 579. 7 columns. I.

OIL-FIRED REVERBERATORY FURNACES. By R. L. Herrick. M. & M., vol. 30, p. 367. 4 columns. I.

BURNING REVERBERATORY ASH AT THE STEPTOE PLANT. By L. Duncan. E. & M. J., vol. 90, p. 1302. 2 columns.

MODERN REVERBERATORY SMELTING OF COPPER ORE. By C. Offerhaus. E. & M. J., vol. 85, p. 1189, 7 columns, I.; p. 1234, 12 columns, I.

REVERBERATORY FURNACES AT BINGHAM, UTAH, IN THE YAMPA SMELTER. M. & M., vol. 31, p. 15. 2 columns. I.

EXPERIMENTS IN REVERBERATORY PRACTICE AT CANANEA, MEXICO. By L. D. Ricketts. T. I. M. & M., vol. 19, p. 147. 39 pages. I.

EXPERIMENTS IN REVERBERATORY PRACTICE, CANANEA. By L. D. Ricketts. E. & M. J., vol. 89, p. 314. 15 columns. I.

REVERBERATORY PRACTICE AT CERRO DE PASCO. E. & M. J., vol. 89, p. 959. 2½ columns.

Bessemerizing of Copper Matte

SUCCESSIVE STAGES IN FLAME OF COPPER CONVERTER. By D. M. Levy. E. & M. J., vol. 90, p. 1207. 4 columns.

OPERATION OF AN ANACONDA COPPER CONVERTER. By C. Offerhaus. E. & M. J., vol. 86, p. 747. 17½ columns. I.

THE BEHAVIOR OF COPPER-MATTE AND COPPER-NICKEL MATTE IN THE BESSEMER CONVERTER. By D. H. Browne. T. A. I. M. E., vol. 41, p. 296. 20½ pages. D.

COOLING COPPER CONVERTER SLAGS, By F. C. Kelley. M. & M., vol. 29, p. 78. 2 columns. I.

COPPER CONVERTERS, HYDRAULICALLY OPERATED. By G. B. Shipley. Min. & Sci. Press, vol. 95, p. 375. 4 columns.

MOVABLE CONVERTER HOODS. By A. H. Wethey. E. & M. J., vol. 85, p. 100. 4 columns. I.

THE LAIST AND TANNER MOVABLE CONVERTER HOOD. By L. S. Austin. Min. & Sci. Press, vol. 95, p. 400. 2 columns. I.

COPPER CONVERTER FLAMES. By D. M. Levy. M. & M., vol. 31, p. 719. 2½ columns.

RECENT PRACTICE IN COPPER MATTE CONVERTING. By R. R. Moore. E. & M. J., vol. 90, p. 460. 16 columns. I.

THE TREATMENT OF OVERBLOWN CHARGES IN COPPER CONVERTERS. By A. R. McKenzie. E. & M. J., vol. 90, p. 1147. 2½ columns.

MODERN TYPE OF THE BARREL COPPER CONVERTER. By C. F. Shelby. E. & M. J., vol. 88, p. 815. 5 columns. I.

THE VORTEX COPPER CONVERTER. By H. Haas. E. & M. J., vol. 89, p. 972. 6½ columns. I.

BASIC LINED CONVERTERS FOR LEADY COPPER MATTES. By R. R. Moore. E. & M. J., vol. 90, p. 263. 5 columns.

RECENT PATENTS FOR BASIC-LINED COPPER CONVERTERS. By R. H. Vail. E. & M. J., vol. 89, p. 563. 6½ columns. I.

COPPER CONVERTERS WITH BASIC LINING. By R. R. Moore. E. & M. J., vol. 89, p. 1317. 11 columns.

A MACHINE FOR CASTING CONVERTER COPPER. By J. H. Klepinger. E. & M. J., vol. 85, p. 903. 5 columns. I.

RELATIVE ELIMINATION OF IRON, SULPHUR, AND ARSENIC IN BESSEMERIZING COPPER-MATTES. By E. P. Mathewson. T. A. I. M. E., vol. 38, p. 154. 6 pages.

Refining of Copper

ELECTROLYTIC COPPER REFINERY. Min. & Sci. Press, vol. 101, p. 75. 1½ columns.

ELECTROLYTIC REFINING OF COPPER. By G. H. Blakemore. M. & M., vol. 30, p. 648. 8½ columns. I.

ELECTROLYTIC REFINING OF COPPER. By G. H. Blakemore. M. & M., vol. 30, p. 746. 9½ columns. I.

A STUDY IN REFINING AND OVERPOLING ELECTROLYTIC COPPER. By H. O. Hofman, R. Hayden, and H. B. Hallowell. T. A. I. M. E., vol. 38, p. 171. 24 pages. I.

ELECTROLYTIC COPPER REFINING IN AUSTRALIA. By G. H. Blackmore. E. & M. J., vol. 90, p. 717, 10½ columns, I.; p. 769, 6 columns.

AN AUSTRALIAN ELECTROLYTIC COPPER REFINERY. By R. G. Casey, Jr. E. & M. J., vol. 90, p. 1111. 11½ columns. I.

EFFECT OF TEMPERATURE ON THE ELECTROLYSIS OF COPPER. E. & M. J., vol. 86, p. 755. 2 columns.

See also COST OF METALLURGICAL TREATMENT.

Electro-Metallurgy

ELECTRIC SMELTING OF ORE AT HEROULT, CALIFORNIA. By J. Tysowski. E. & M. J., vol. 90, p. 269. 8½ columns. I.

ELECTRIC SMELTING WITH THE GIROD FURNACE. By W. Borchers. E. & M. J., vol. 88, p. 1113. 13½ columns. I.

ELECTRIC SMELTING IN SWEDEN. By E. J. Ljungberg. M. & M., vol. 30, p. 288. 2½ columns. I.

ELECTRIC SMELTING. By G. H. Clavenger. U. S. G. S., Mineral Resources, 1905. 12 pages.

THE ELECTRIC FURNACE: Its Place in Siderurgy. By P. McNiven Bennie. P. E. Soc. W. Pa., vol. 26, p. 487. 45 pages. I.

THE POSITION OF THE ELECTRIC FURNACE. By P. McN. Bennie. E. & M. J., vol. 88, p. 84. 1½ columns.

ELECTROLYSIS IN METALLURGY OF COPPER, LEAD, ZINC, AND OTHER METALS. By C. O. Mailloux. U. S. G. S., Mineral Resources, 1882, vol. 17. 32 pages.

THE STASSANO ELECTRIC FURNACE. By F. C. Perkins. M. & M., vol. 29, p. 277. 2 columns. I.

RECENT IMPROVEMENTS IN ELECTROLYTIC CELLS. By H. S. Renaud. E. & M. J., vol. 85, p. 405. 3½ columns. I.

NEW RESISTANCE AND INDUCTION FURNACES. By A. Gradenwitz. E. & M. J., vol. 87, p. 364. 3½ columns. I.

See also **COST OF METALLURGICAL TREATMENT.**

Glass Making

HISTORY OF GLASS MAKING. By G. A. Macbeth. P. E. Soc. W. Pa., vol. 23, p. 625. 21 pages. D.

QUESTIONS ARISING IN THE MAKING OF GLASS. By R. L. Frink. P. E. Soc. W. Pa., vol. 23, p. 646. 10 pages. I.

GLASS MAKING. Min. & Sci. Press, vol. 20, p. 57. 2 columns.

See also **OCCURRENCE OF GLASS SANDS.**

Metallurgy of Gold and Silver

PREPARATION OF THE ORES OF SILVER-LEAD, AND COPPER, AND THEIR METALLURGICAL TREATMENT AT THE WORKS AT LOZÈRE, FRANCE. By M. Lau. Min. Mag., vol. 7, p. 219, 11½ pages; p. 470, 6 pages.

THE METALLURGICAL TREATMENT OF THE SULPHO TELLURIDE ORES OF KALGOORLIE, WITH SPECIAL REFERENCE TO EXPERIMENTS CONDUCTED AND SULPHIDE MILL ERECTED ON THE ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED. By L. W. Grayson. T. Au. I. M. E., vol. 7, p. 170, 20 pages; vol. 8, pt. 1, p. 114, 13 pages.

EXTRACTION OF GOLD BY HYPOSULPHITE OF SODIUM, AND ROASTING ORE FOR CYANIDING. By E. Janitzky. T. Au. I. M. E., vol. 7, p. 99. 3 pages.

THE SOLUBILITY OF GOLD IN THIOSULPHATES AND THIOCYANATES. By H. A. White. P. C. M. & M., Soc. S. A., vol. 6, p. 109, 4½ columns; p. 197, 1 column; p. 225, 2 columns; p. 274, 1½ columns.

ON THE LIXIVIATION OF AN AURIFEROUS ARSENOPIRYTE CONCENTRATE. By T. T. Fulton. J. M. Soc. N. S., vol. 10, p. 97. 27½ pages. D.

THIOCARBANIDE: A New Solvent for Gold. By J. Moir. P. C. M. & M. Soc. S. A., vol. 6, p. 332. 9 columns.

HYDROMETALLURGY OF COBALT ORES. By E. B. Wilson. M. & M., vol. 31, p. 303. 9 columns. I.

See also **CYANIDING GOLD, ETC., METALLURGY OF LEAD, and COST OF METALLURGICAL TREATMENT.**

Smelting Gold and Silver

BLAST FURNACE GASES IN SILVER-LEAD SMELTING. By L. S. Austin. Min. & Sci. Press, vol. 97, p. 364. 1½ column.

HEAT OF FUSION OF SILVER-LEAD BLAST FURNACE SLAG. By L. S. Austin. Min. & Sci. Press, vol. 96, p. 567. ½ column.

CALCULATION OF A SILVER-LEAD BLAST FURNACE CHARGE. By J. A. Barr. Min. & Sci. Press, vol. 101, p. 672, 3 columns; p. 710, 3 columns.

SILVER-LEAD SMELTING IN TASMANIA. By T. Kapp. E. & M. J., vol. 89, p. 727. 3½ columns.

SILVER-LEAD SMELTING PRACTICE. By L. S. Austin. Min. & Sci. Press, vol. 95, p. 59. 1½ columns.

SILVER-LEAD SMELTING AT EAST HELENA, MONTANA. E. & M. J., vol. 87, p. 350. 1 column.

SMELTER OF PENOLAS COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 373. 6 columns. I.

MODERN SILVER-LEAD SMELTING AT LAURIUM, GREECE. By H. F. Collins. E. & M. J., vol. 87, p. 881. 8½ columns. I.

See also **THE METALLURGY OF LEAD.**

CHANCELLORSVILLE GOLD AND SILVER ORE REDUCTION COMPANY. Min. Mag., vol. 9, p. 451. 4 pages.

METALLURGICAL CONDITIONS AT COBALT, ONTARIO, CANADA, 1908. By F. N. Flynn. J. C. M. I., vol. 11, p. 293. 42 pages.

THE SMELTING OF COBALT ORES. By H. W. Hixon. J. C. M. I., vol. 10, p. 74. 2½ pages.

THE REDUCTION OF AURIFEROUS ORES. By C. F. Stansbury. Min. Mag., vol. 2, p. 239. 5½ pages.

METALLURGY OF THE KALGOORLIE GOLDFIELD. By G. W. Williams. E. & M. J., vol. 85, p. 345. 11 columns. I.

THE PEARCE GOLD-SEPARATION PROCESS. By H. V. Pearce. T. A. I. M. E., vol. 39, p. 722. 12 pages.

Cyaniding, Processes, Theory, Etc.

THE ACTION OF CYANIDE OF POTASSIUM ON GOLD AND SOME OTHER METALS AND MINERALS. By G. A. Goyder. T. A. I. M. E., vol. 1, p. 84. 15 pages. I.

THEORY OF THE DISSOLUTION OF METALS BY CYANIDE. By J. B. Stuart. Min. & Sci. Press, vol. 101, p. 180. 2½ columns.

CYANIDATION OF ORE CONTAINING BOTH COARSE AND FINE GOLD. Min. & Sci. Press, vol. 95, p. 709, 2½ columns; p. 742, 1 column; p. 775, 2½ columns.

TESTS ON ACID REGENERATION OF CYANIDE SOLUTIONS. By R. P. Wheelock. Min. & Sci. Press, vol. 99, p. 814. 10 columns. I.

TABLE FOR STANDARDIZING SUMP SOLUTIONS. By C. W. Hess. Min. & Sci. Press, vol. 101, p. 445. Table.

THE DETERMINATION OF CONSTANTS IN WORKING CYANIDE SOLUTIONS. By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 5, p. 13, 7½ columns; p. 54, 7½ columns.

RAPID ESTIMATION OF PULP IN CYANIDE TANKS. By M. R. Lamb. E. & M. J., vol. 89, p. 160. 2 columns.

SPECIFIC GRAVITY ESTIMATION OF PULP. By F. B. Hyder. M. & M., vol. 31, p. 715. 3½ columns. D.

CARBON AND CELLULOSE IN CYANIDE SOLUTIONS. By A. J. Clark and W. J. Sharwood. Min. & Sci. Press, vol. 100, p. 554. 5 columns.

GRAPHITE: AN OBSTACLE TO GOOD CYANIDING. By M. W. Von Bernewitz. Min. & Sci. Press, vol. 99, p. 758. 2½ columns. I.

TWO DETERRENTS TO THE DISSOLUTION OF FREE GOLD IN THE CYANIDE PROCESS. By D. Simpson. T. I. M. & M., vol. 17, p. 330. 1 page.

- CYANIDATION OF RAW PYRITIC CONCENTRATES.** P. C. M. & M. Soc. S. A., vol. 7, p. 422. $\frac{1}{2}$ column.
- CYANIDATION OF SULPHIDES.** By M. N. Colman. Min. & Sci. Press, vol. 101, p. 308. 3 columns.
- RECOVERY OF ZINC FROM SOLUTIONS.** M. & M., vol. 30, p. 378. $1\frac{1}{2}$ columns.
- THE LABORATORY IN ITS RELATION TO THE CYANIDE PROCESS.** By G. A. Bytn. T. Au. I. M. E., vol. 4, p. 173. $13\frac{1}{2}$ pages.
- THE ELIMINATION OF GOLD BEARING SOLUTION FROM SANDS.** By W. A. Caldecott and A. McA. Johnston. P. C. M. & M. Soc. S. A., vol. 8, p. 153. $1\frac{1}{2}$ columns. I.
- OXIDATION AND CYANIDATION.** By H. A. Megraw. E. & M. J., vol. 88, p. 645. $4\frac{1}{2}$ columns. D.
- THE DESTRUCTION OF CYANIDE.** By J. Moir. P. C. M. & M. Soc. S. A., vol. 10, p. 433. $32\frac{1}{2}$ columns. D.
- CHEMISTRY OF THE BROMO-CYANOGEN PROCESS.** By S. H. Warrell. Min. & Sci. Press, vol. 98, p. 356. $2\frac{1}{2}$ columns.
- See also **CHEMICAL ANALYSIS IN CYANIDING.**
- BROMO-CYANIDING OF GOLD ORES.** By E. W. Nardin. Min. & Sci. Press, vol. 97, p. 562. $5\frac{1}{2}$ columns.
- BROMO-CYANIDING OF GOLD ORES.** By E. W. Nardin. T. Au. I. M. E., vol. 12, p. 69. 10 pages.
- ACTION OF ALKALINE SOLUTIONS IN CYANIDING.** P. C. M. & M. Soc. S. A., vol. 8, p. 281. $2\frac{1}{2}$ columns.
- LIME REACTION IN CYANIDING.** By T. P. Holt. M. & M., vol. 31, p. 475. $1\frac{1}{2}$ columns.
- NOTES ON THE ESTIMATION OF CAUSTIC LIME.** By E. H. Croghan. P. C. M. & M. Soc. S. A., vol. 8, p. 37, 11 columns; p. 84, $1\frac{1}{2}$ columns; p. 122, 11 columns; p. 145, $\frac{1}{2}$ column; p. 183, 8 columns; p. 206, 6 columns.
- LABORATORY TESTS ON THE USE OF COARSE AND FINE LIME FOR CYANIDING.** By W. J. Sharwood. P. C. M. & M., Soc. S. A., vol. 8, p. 293. $9\frac{1}{2}$ columns. D.
- AUTOMATIC ZINC DUST FEEDER.** By J. S. Colbath. E. & M. J., vol. 89, p. 453. 2 columns. I.
- A NOVEL WASHING AND LEACHING APPARATUS.** By A. Gradenwitz. E. & M. J., vol. 86, p. 227. 2 columns. I.
- NEW CYANIDE DEVICE.** By L. Fraser. Min. & Sci. Press, vol. 101, p. 504. $2\frac{1}{2}$ columns. I.
- A CHEAP FORM OF CYANIDE PLANT.** By C. Hunter. T. I. M. & M., vol. 17, p. 268. 8 pages.
- HOME-MADE CYANIDE PLANT.** By W. F. Boericke and B. L. Eastman. Min. & Sci. Press, vol. 97, p. 712. $1\frac{1}{2}$ columns.
- A ROTARY EXTRACTOR FOR PRECIOUS METALS FROM SOLUTIONS.** By W. D'Arcy and E. T. Rand. P. C. M. & M., Soc. S. A., vol. 10, p. 201. 6 columns. I.
- THE KIDNEY PULP DISTRIBUTOR.** By C. T. Rice. E. & M. J., vol. 90, p. 1046. $3\frac{1}{2}$ columns. I.
- CYANIDATION WITH THE BROWN VAT.** By F. Narvaez. Min. & Sci. Press, vol. 95, p. 689. $1\frac{1}{2}$ columns. I.
- A MODIFICATION OF PACHUCA-TANK PRACTICE.** By A. J. Yager. Min. & Sci. Press, vol. 101, p. 539. 2 columns. I.
- CONTINUOUS AGITATION SYSTEM AT ESPERANZA.** By M. A. Kuryla. E. & M. J., vol. 90, p. 213. $3\frac{1}{2}$ columns. I.
- AIRLIFT AGITATION IN CYANIDING.** P. C. M. & M. Soc. S. A., vol. 8, p. 358. $1\frac{1}{2}$ columns.
- NOTES ON AIR AGITATION.** By M. R. Lamb. E. & M. J., vol. 86, p. 901. 3 columns.
- AGITATION BY COMPRESSED AIR.** By F. C. Brown. Min. & Sci. Press, vol. 97, p. 424. $6\frac{1}{2}$ columns. I.

- ASSISTING THE SOLUTION OF GOLD IN THE CYANIDE PROCESS BY COMPRESSED AIR. By A. F. Crosse. P. C. M. & M. Soc. S. A., vol. 8, p. 36. 1 column.
- See also COMPRESSED AIR IN MINING.
- CYANIDE LIXIVIATION BY AGITATION. By W. M. Brodie. E. & M. J., vol. 87, p. 695. 3½ columns. I.
- A NEW METHOD OF AGITATING CYANIDE PULPS. By E. G. Spilsbury. E. & M. J., vol. 89, p. 662. 3 columns.
- METHODS OF PULP AGITATION. By L. M. Kniffen. Min. & Sci. Press, vol. 100, p. 824. 2½ columns.
- AGITATOR FOR CYANIDE TESTS. By G. H. Clevenger. Min. & Sci. Press, vol. 98, p. 759. 1 column. I.
- BROWN TYPE OF LABORATORY AGITATOR. By T. S. Lawlor. Min. & Sci. Press, vol. 99, p. 197. 2½ columns. I.
- COMBINED AGITATOR AND VACUUM-FILTER FOR CYANIDING. Min. & Sci. Press, vol. 96, p. 459. 1 column. I.
- PRESENT TENDENCIES IN CYANIDE PRACTICE. By M. R. Lamb. E. & M. J., vol. 90, p. 855. 11½ columns.
- PROGRESS IN CYANIDATION IN 1909. By A. James. Min. & Sci. Press, vol. 98, p. 47. 13 columns. I.
- IMPROVEMENTS IN THE CYANIDE PROCESS. By B. MacDonald. Min. & Sci. Press, vol. 100, p. 798. 4 columns. I.
- CYANIDE PRACTICE. By A. James. Min. & Sci. Press, vol. 100, p. 41. 12 columns. I.
- PROPOSED SIMPLIFICATION OF THE CYANIDE PROCESS. By B. Mierisch. E. & M. J., vol. 89, p. 1327. 4 columns. I.
- PROGRESS AND DEVELOPMENTS IN CYANIDE PRACTICE. By M. R. Lamb. E. & M. J., vol. 89, p. 178. 5 columns.
- HISTORY OF CYANIDATION. By P. Argall. Min. & Sci. Press, vol. 95, p. 655, 5½ columns; p. 682, 6½ columns.
- PROGRESS IN CYANIDATION. By A. James. E. & M. J., vol. 87, p. 1194. 3 columns.
- NOTES ON CYANIDATION. By L. D. Bishop. E. & M. J., vol. 87, p. 842. 6½ columns. I.
- IMPROVEMENT IN CYANIDE PRACTICE. By E. G. Spilsbury. T. A. I. M. E., vol. 41, p. 367. 12 pages. I.
- BEGINNINGS OF CYANIDATION. By J. McCombie. Min. Mag. London, vol. 4, p. 456. 2 columns.
- DEVELOPMENTS IN CYANIDE PRACTICE. By P. E. Barbour. M. & M., vol. 31, p. 597. 8 columns. I.
- SOME MODERN METHODS IN ORE TREATMENT BY CYANIDATION. By E. O. Watt. T. Au. I. M. E., vol. 9, p. 76. 18 pages. I.
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- THE CLANCY PROCESS: Lixiviation Process. By J. C. Clancy. Min. & Sci. Press, vol. 101, p. 862. 5½ columns.
- THE CLANCY CYANIDE PROCESS. M. & M., vol. 31, p. 433. 3 columns.
- THE ADAIR-USHER PROCESS. By A. Adair. P. C. M. & M. Soc. S. A., vol. 8, p. 331, 18½ columns, D.; vol. 9, p. 23, 2 columns; p. 48, 5 columns; p. 94, 5 columns; p. 118, 3 columns; p. 158, 7½ columns.
- THE NEW CLANCY CYANIDE PATENTS. E. & M. J., vol. 90, p. 701. 9 columns.
- RECENT DEVELOPMENTS IN THE ATTEMPT TO AMEND THE CYANIDE PATENT. By G. G. Turri. T. Au. I. M. E., vol. 4, p. 195. 20 pages.
- CYANIDATION OF CONCENTRATE. By F. C. Brown. Min. & Sci. Press, vol. 101, p. 273. 1½ columns.

- CYANIDING CONCENTRATE AT TARACOL, KOREA. By J. D. Hubbard. *Min. & Sci. Press*, vol. 99, p. 471. 5½ columns.
- NOTES ON THE CYANIDE TREATMENT OF CONCENTRATES. By A. Grothe. *E. & M. J.*, vol. 88, p. 668. 3½ columns. I.
- CYANIDATION OF CONCENTRATES. By A. E. Drucker. *Min. & Sci. Press*, vol. 100, p. 416. 4½ columns. I.
- NOTE ON THE CYANIDING OF CONCENTRATES BY PERCOLATION. By A. L. Edwards. *P. C. M. & M. Soc. S. A.*, vol. 5, p. 345. 1½ columns.
- LAST DRAININGS. By H. A. White. *P. C. M. & M. Soc. S. A.*, vol. 7, p. 239, 9 columns, D.; p. 329, 4 columns; p. 407, 8 columns, D.; vol. 8, p. 15, 2½ columns.
- A QUICK TREATMENT BY CYANIDE OF "BLACK SANDS." By B. V. Burnett. *P. C. M. & M. Soc. S. A.*, vol. 6, p. 240, 2 columns; p. 277, 1 column; p. 316, 1 column; p. 344, 1½ columns.
- ELECTROCHEMISTRY OF SOLUTION OF GOLD IN POTASSIUM CYANIDE. *P. C. M. & M. Soc. S. A.*, vol. 10, p. 21. 2½ columns.
- CONTINUOUS COLLECTION OF SAND FOR CYANIDING. By W. A. Caldecott. *Min. & Sci. Press*, vol. 99, p. 659. 4 columns.
- THE CONTINUOUS COLLECTION OF SAND FOR CYANIDING. By W. A. Caldecott. *P. C. M. & M. Soc. S. A.*, vol. 10, p. 43, 2½ columns, I.; p. 142, 2 columns; p. 238, 2½ columns.
- SAND COLLECTING AND WASHING. *P. C. M. & M. Soc. S. A.*, vol. 8, p. 391. 1½ columns.
- See also SAND TREATMENT.
- NOTES ON THE PRECIPITATING EFFECTS OF SUBSTANCES CONTAINING VARIOUS FORMS OF CARBON AND CELLULOSE ON CYANIDE SOLUTIONS CONTAINING GOLD AND SILVER. By A. J. Clark and W. J. Sharwood. *P. C. M. & M. Soc. S. A.*, vol. 10, p. 234, 8 columns; p. 405, 1 column.
- PRECIPITATION FROM CYANIDE SOLUTIONS BY ZINC SHAVINGS AND DUST: A Comparison of Results and Costs. By A. J. Clark. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 222, 3 columns; vol. 10, p. 205, 3 columns.
- EXPERIMENTS ON THE PRECIPITATION OF GOLD FROM CYANIDE SOLUTION BY CARBON IN LIME. By E. H. Croghan. *P. C. M. & M. Soc. S. A.*, vol. 10, p. 391. 5 columns.
- PRECIPITATION OF GOLD BY CARBONACEOUS MATTER. By W. A. Caldecott. *Min. & Sci. Press*, vol. 98, p. 828. 1½ columns.
- ZINC BOX WHITE PRECIPITATES. By R. F. Coolidge. *Min. & Sci. Press*, vol. 99, p. 394. 4 columns.
- ELECTRICAL PRECIPITATION FROM CYANIDE SOLUTIONS. *E. & M. J.*, vol. 89, p. 598. 1½ columns.
- ELECTROLYTIC PRECIPITATION. By M. R. Lamb. *E. & M. J.*, vol. 87, p. 705. 2 columns.
- PRECIPITATION OF GOLD AND SILVER BY SOLUBLE SULPHIDES. *E. & M. J.*, vol. 87, p. 841. 1½ columns.
- NOTES ON PRECIPITATION. By M. Smith. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 300. 4½ columns; p. 351, 1½ columns.
- ZINC DUST PRECIPITATION. By A. J. Clark. *Min. Mag. London*, vol. 4, p. 289. 7½ columns. I.
- ZINC DUST PRECIPITATION AT THE HOMESTAKE MINE. By R. Linton. *E. & M. J.*, vol. 88, p. 199. 1½ columns.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO. By R. Linton. *P. C. M. & M. Soc. S. A.*, vol. 10, p. 60. 2½ columns.
- ZINC DUST PRECIPITATION AT MERCUR, UTAH. *E. & M. J.*, vol. 86, p. 79. 1 column.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO. By Robt. Linton. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 74, 5 columns; p. 165, 3 columns; p. 207, 1½ columns; p. 232, 1 column.

- ZINC BOX PRECIPITATION AT PARRAL, MEXICO.** E. & M. J., vol. 86, p. 122. 1½ columns.
- THE "WHITE PRECIPITATE" OF THE PRECIPITATING BOXES IN THE CYANIDE WORKS.** By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 62, 1 column; p. 75, 8 columns; p. 129, 10½ columns; p. 148, 5½ columns; p. 171, 6 columns; p. 310, 1½ columns.
- DE WILDE PRECIPITATION PROCESS.** By G. Witteveen. M. & M., vol. 31, p. 342. 3½ columns.
- THE TREATMENT OF SLIMES BY CYANIDATION AND ELECTRICAL PRECIPITATION ON MERCURY.** By F. T. Mumford. T. Au. I. M. E., vol. 9, p. 96. 10 pages. I.
- CYANIDING SLIME.** By M. R. Lamb. T. A. I. M. E., vol. 40, p. 775. 4½ pages. I.
- SLIME TREATMENT IN CYANIDING.** T. A. I. M. E., vol. 40, p. 768. 6 pages. I.
- CYANIDING SLIME.** T. A. I. M. E., vol. 40, p. 775. 4½ pages. I.
- SETTLING SLIME IN CYANIDE TREATMENT.** P. C. M. & M. Soc. S. A., vol. 9, p. 411. 1 column.
- IMPROVEMENTS IN SLIME TREATMENT.** By M. Torrente. P. C. M. & M. Soc. S. A., vol. 5, p. 46, 6½ columns, I.; p. 83, 1½ columns; p. 100, 1½ columns; p. 127, 3 columns; p. 150, 4 columns; p. 179, 3½ columns.
- NOTES ON IMPROVEMENTS IN THE CYANIDE TREATMENT OF SANDS AND SLIMES.** By C. H. Pead. P. C. M. & M., Soc. S. A., vol. 6, p. 76, 4 columns; p. 194, 2 columns; p. 223, 3 columns; p. 249, 3½ columns.
- COLLOIDAL SILICIC ACID IN SLIMES.** By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 7, p. 217. 1 column.
- THE TREATMENT OF ACCUMULATED SLIME, AND THE USE OF FILTER PRESSES FOR CLARIFYING SLIME SOLUTION AND BY-PRODUCTS.** By J. D. O'Hara. P. C. M. & M. Soc. S. A., vol. 10, p. 342, 5 columns; p. 403, 2 columns, I.
- TREATMENT OF A CONCENTRATE-SLIME.** By A. E. Drucker. Min. & Sci. Press, vol. 96, p. 458. 5 columns. I.
- THE SEPARATION OF SLIME IN CYANIDE TREATMENT.** By H. G. Nichols. Min. & Sci. Press, vol. 96, p. 563. 7 column. I.
- TREATMENT OF SLIME IN THE CYANIDE PROCESS.** Min. & Sci. Press, vol. 100, p. 798. 4 columns. I.
- SLIME TREATMENT IN CYANIDING.** Min. & Sci. Press, vol. 100, p. 44. 5 columns. I.
- A METHOD OF SETTLING SLIMES, AS APPLIED TO THEIR SEPARATION FROM SOLUTION IN CYANIDE TREATMENT.** By H. G. Nichols. T. I. M. & M., vol. 17, p. 293. 38 pages. I.
- CYANIDE TREATMENT OF SLIME.** P. C. M. & M. Soc. S. A., vol. 10, p. 322. 3½ columns.
- METHOD OF TESTING SLIME.** By G. J. Young. Min. Mag., London, vol. 3, p. 133. 2½ columns. I.
- SLIME TREATMENT BY CYANIDATION.** E. & M. J., vol. 88, p. 688. 5½ columns.
- A PROPOSED NEW SYSTEM FOR THE CYANIDE TREATMENT OF SLIMES.** By F. McCann. E. & M. J., vol. 88, p. 688. 5½ columns.
- CYANIDING SLIMES.** E. & M. J., vol. 89, p. 462. 1½ columns. I.
- ALL-SLIME TREATMENT OF ORE IN CYANIDE PLANTS.** By H. A. Megraw. E. & M. J., vol. 89, p. 319. 5 columns. I.
- CYANIDING SLIMES.** E. & M. J., vol. 89, p. 319. 5 columns. I.
- CYANIDING SLIME: PROCESS.** By E. B. Wilson. M. & M., vol. 29, p. 59. 6 columns. I.
- SLIME TREATMENT IN CYANIDING.** By E. B. Wilson. M. & M., vol. 29, p. 59. 6 columns. I.

- SLIME TREATMENT IN CYANIDING. M. & M., vol. 29, p. 129, 9 columns, I.; p. 187, 3 columns, I.; p. 224, 6 columns, I.
- SLIMING ORE FOR CYANIDATION. By M. R. Lamb. Min. & Sci. Press, vol. 95, p. 658. 1½ columns.
- SLIME SETTLING BEFORE CYANIDING. E. & M. J., vol. 87, p. 837. 3 columns. I.
- ALL-SLIMING. By E. M. Hamilton. Min. & Sci. Press, vol. 99, p. 255. 5½ columns. I.
- THE CHEMICAL CONTROL OF SLIMES. By H. E. Ashley. T. A. I. M. E., vol. 41, p. 380. 16 pages. I.
- SLIME TREATMENT AT VARIOUS CYANIDE PLANTS. Min. & Sci. Press, vol. 95, p. 46. 4½ columns.
- THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT. By A. Salkinson. P. C. M. & M. Soc. S. A., vol. 7, p. 403, 6 columns; vol. 8, p. 52, 1 column; p. 81, 7½ columns; p. 142, 6½ columns.
- FURTHER NOTES ON THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT. By A. Salkinson. P. C. M. & M. Soc. S. A., vol. 9, p. 308. 3½ columns.
- PROPOSED PROCESS FOR TREATMENT OF ZINC GOLD SLIMES BEFORE SMELTING. By C. E. Meyer. P. C. M. & M. Soc. S. A., vol. 6, p. 361, 6 columns; p. 83, 1 column; p. 139, 2 columns.
- THE DORR CONTINUOUS SLIME THICKENER. M. & M., vol. 30, p. 79. 1½ columns. I.
- SLIME TREATMENT AT KALGOORLIE. By M. W. von Bernewitz. Min. & Sci. Press, vol. 95, p. 743. 2 columns. I.
- SLIME TREATMENT AT THE SANTA NATALIA MILL. By C. Shapeley. E. & M. J., vol. 90, p. 358. 4 columns. I.
- ALL-SLIME CYANIDE PROCESS AT HACIENDA DE LA UNION. E. & M. J., vol. 86, p. 991. 2 columns.
- SLIME TREATMENT AT THE TAJO, ROSARIO MILL, MEXICO. T. A. I. M. E., vol. 41, p. 345. 11 pages. I.
- SLIME TREATMENT AT THE NORTH STAR MINES, CALIFORNIA. E. & M. J., vol. 90, p. 410. 1 column.
- FILTER PRESS TREATMENT OF SLIMES. By H. R. Edmans. T. A. I. M. E., vol. 41, p. 77. 19½ pages. I.
- NOTES ON THE USE OF THE FILTER PRESS FOR CLARIFYING SOLUTIONS. By S. J. Truscott and A. Yates. P. C. M. & M. Soc. S. A., vol. 7, p. 3, 2½ columns; p. 45, 2 columns; p. 83, 2 columns; p. 269, ¼ column; p. 321, 2 columns.
- FILTERING SLIMES. By E. Parrish. Min. & Sci. Press, vol. 99, p. 493. 2½ columns.
- FILTER PRESS WORK. M. & M., vol. 31, p. 600. 1 column. I.
- FILTER PRESSING SLIMES. By M. W. von Bernewitz. Min. & Sci. Press, vol. 101, p. 377. 3 columns.
- FILTER PRESS WORK IN CYANIDING CONCENTRATE. Min. & Sci. Press, vol. 100, p. 416. 3 columns. I.
- VACUUM FILTRATION. By A. Nichols. Min. & Sci. Press, vol. 100, p. 395. 2 columns. I.
- FILTER PRESSING. P. C. M. & M. Soc. S. A., vol. 10, p. 222. ½ column.
- THE FILTER PRESS IN CYANIDING. By E. B. Wilson. M. & M., vol. 29, p. 129, 9 columns, I.; p. 187, 3 columns, I.; p. 224, 6 columns, I.
- FILTERING SLIMES IN CYANIDING. Min. & Sci. Press, vol. 95, p. 715. 3 columns. I.
- FILTERING GOLD SLIME. By E. Jensen. E. & M. J., vol. 87, p. 902. 2 columns. I.
- CONTINUOUS VACUUM-FILTER MACHINE. By B. Hunt. Min. & Sci. Press, vol. 97, p. 430. 3 columns. I.
- CONTINUOUS SLIME FILTER. By R. Schorr. Min. & Sci. Press, vol. 97, p. 194. 4 columns. I.

- OLIVER CONTINUOUS FILTER.** By A. H. Martin. Min. & Sci. Press, vol. 99, p. 715. 2 columns. I.
- USE OF THE OLIVER CONTINUOUS FILTER AT THE NORTH STAR MINES, CALIFORNIA.** E. & M. J., vol. 90, p. 411. 1 column. I.
- THE OLIVER FILTER PRESS AT GRASS VALLEY.** E. & M. J., vol. 87, p. 440. $\frac{1}{2}$ column. I.
- THE OLIVER CONTINUOUS FILTER AT MINAS DEL TAJO.** By G. A. Tweedy and R. L. Beals. E. & M. J., vol. 89, p. 506. 5 columns. I.
- THE BURT RAPID CYANIDE FILTER.** By E. Burt. Min. & Sci. Press, vol. 95, p. 717. $3\frac{1}{2}$ columns. I.
- THE BUTTERS' SLIME-FILTER AT THE CYANIDE PLANT OF THE COMBINATION MINES COMPANY, GOLDFIELD, NEVADA.** By M. R. Lamb. T. A. I. M. E., vol. 38, p. 200. 10 pages. I.
- THE BUTTERS' FILTER USED AT THE MONTEZUMA MILL, COSTA RICA.** E. & M. J., vol. 90, p. 716. $\frac{1}{2}$ column.
- THE SWEETLAND FILTER PRESS.** By E. J. Sweetland. E. & M. J., vol. 85, p. 359. 3 columns. I.
- THE HUNT CONTINUOUS SLIME FILTER.** P. C. M. & M. Soc. S. A., vol. 10, p. 295. $1\frac{1}{2}$ columns.
- FILTERING SLIMES BY RIDGEWAY FILTER.** E. & M. J., vol. 86, p. 121. 1 column.
- PRESSURE FILTRATION.** By E. J. Sweetland. Min. & Sci. Press, vol. 99, p. 853. $4\frac{1}{2}$ columns. I.
- THE BLAISDELL PRESSURE FILTER.** Min. & Sci. Press, vol. 95, p. 188. 1 column. I.
- VACUUM SLIME-FILTERS AT GOLDFIELD.** By A. M. Smith. Min. & Sci. Press, vol. 99, p. 65. 2 columns.
- THE FAIRCHILD VACUUM-FILTER.** Min. & Sci. Press, vol. 95, p. 279. 1 column. I.
- VACUUM SLIME-FILTERS.** Min. & Sci. Press, vol. 95, p. 46. $4\frac{1}{2}$ columns.
- IMPROVEMENTS IN THE TREATMENT OF SLIME BY THE VACUUM-FILTER PROCESS.** By A. W. Allen. E. & M. J., vol. 87, p. 1004. 3 columns. I.
- VACUUM-FILTER TREATMENT OF SLIMES.** E. & M. J., vol. 87, p. 1004. 3 columns. I.
- VACUUM-FILTERING OF SLIME AT WAIHI, NEW ZEALAND.** P. C. M. & M. Soc. S. A., vol. 8, p. 13. 2 columns.
- FILTRATION OF SLIMES AT EL ORO, MEXICO.** By D. L. H. Forbes. E. & M. J., vol. 86, p. 458. $3\frac{1}{2}$ columns. I.
- FILTER PRESSES AT THE TAJO, ROSARIO MILL, MEXICO.** T. A. I. M. E., vol. 41, p. 349. 12 pages.
- FILTER PRESS PRACTICE IN THE HOME-STAKE MILLS.** Min. & Sci. Press, vol. 95, p. 21. $4\frac{1}{2}$ columns. I.
- SLIME TREATMENT AT THE EL ORO MILL, MEXICO.** E. & M. J., vol. 87, pp. 688 and 689. 4 columns.
- See also SLIMES AND THEIR TREATMENT.
- SOME SUGGESTIONS ON THE CYANIDING OF TAILINGS.** By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 338, $6\frac{1}{2}$ columns; vol. 6, p. 113, $1\frac{1}{2}$ columns; p. 190, $\frac{1}{2}$ column.
- A PROPOSED METHOD OF TREATING SAND RESIDUE DUMPS.** By S. J. Truscott and A. Yates. P. C. M. & M. Soc. S. A., vol. 6, p. 213. $3\frac{1}{2}$ columns; vol. 7, p. 293, 3 columns.
- THE CYANIDING OF REFRACTORY TAILINGS ON THE WITWATERSRAND.** By W. H. C. Lovely. T. A. I. M. E., vol. 11, p. 104. 9 pages.
- RE-TREATMENT OF TAILING AT OROYA-BROWN HILL.** Min. Mag. London, vol. 4, p. 460. $1\frac{1}{2}$ columns. I. Flowsheet.
- See also SAND TREATMENT.

- CYANIDATION OF SILVER ORES. By W. J. Sharwood. Min. & Sci. Press, vol. 97, p. 418. 5 columns.
- CYANIDATION OF MANGANESE SILVER ORES. By E. M. Hamilton. Min. & Sci. Press, vol. 99, p. 756. 2½ columns.
- CYANIDATION OF SILVER ORES. By F. P. Holt. Min. & Sci. Press, vol. 98, p. 546. 4 columns. Tables.
- CYANIDATION OF SILVER ORES. By T. P. Holt. Min. & Sci. Press, vol. 99, p. 159. 6½ columns. D.
- CYANIDATION OF SILVER ORES. By D. Mosher. Min. & Sci. Press, vol. 98, p. 691. 5½ columns. I.
- CYANIDATION OF SILVER ORES. By L. B. Kniffin. Min. & Sci. Press, vol. 100, p. 322. 1½ columns.
- TREATMENT OF THE MOUNT REID AURIFEROUS ORES WITH THE HELP OF CYANIDE OF POTASSIUM. By L. Williams. T. Au. I. M. E., vol. 4, p. 45. 5 pages.
- EXPERIMENTS ON THE ASSAY OF ACID WASHES RESULTING FROM THE CYANIDE "CLEAN-UP" BY THE USE OF BISULPHATE. By L. J. Wilmoth. P. C. M. & M. Soc. S. A., vol. 10, p. 136. 5½ columns.
- THE USE OF THE BISULPHATE OF SODIUM IN THE CLEAN-UP. By J. E. Thomas and G. W. Williams. P. C. M. & M. Soc. S. A., vol. 5, p. 334, 7 columns; vol. 6, p. 82, 4 columns; p. 113, ½ columns, p. 156, 3 columns.
- CYANIDE WORKS' CLEAN-UP PRACTICE. By J. E. Thomas. P. C. M. & M., Soc. S. A., vol. 7, p. 109, 3 columns; p. 181, 2½ columns; p. 211, 5 columns; p. 268, 1½ columns.
- NOTES ON LIME, CLEAN-UP, ETC. By G. W. Williams. P. C. M. & M., Soc. S. A., vol. 5, p. 251, 7½ columns; p. 314, 2 columns; vol. 6, p. 19, 4 columns; p. 51, 3 columns; p. 78, 5 columns.
- SOME FURTHER IMPROVEMENTS IN APPLIANCES FOR THE CYANIDE CLEAN-UP. By D. V. Burnett. P. C. M. & M. Soc. S. A., vol. 5, p. 145, 5 columns, I.; p. 211, 1½ columns; p. 235, 2½ columns; p. 255, 1½ columns.
- CYANIDATION AT THE ALASKA-TREADWELL MINES. By T. A. Rickard. Min. Mag., London, vol. 3, p. 280. 2 columns.
- CYANIDING CRIPPLE CREEK DUMPS. M. & M., vol. 29, p. 444. ¼ column.
- CYANIDATION OF CRIPPLE CREEK ORES. By P. Argall. Min. & Sci. Press, vol. 101, p. 804. 3½ columns.
- CYANIDING AT THE MONTEZUMA MILL, COSTA RICA. E. & M. J., vol. 90, p. 716. 3 columns.
- CYANIDING AT THE NORTH STAR MINES, GRASS VALLEY. E. & M. J., vol. 87, p. 440. 3 columns. I.
- CYANIDING AT THE NORTH STAR MINES IN CALIFORNIA. By J. Tyssowski. E. & M. J., vol. 90, p. 409. 8½ columns. I.
- CYANIDE PRACTICE AT THE HOMESTAKE MILLS. By F. L. Bosqui. Min. & Sci. Press, vol. 95, p. 21. 4½ columns. I.
- CYANIDING BLACK HILLS "BLUE ORES." By B. D. O'Brien. M. & M., vol. 29, p. 427. 9 columns.
- CYANIDING SILVER ORES IN HONDURAS. By G. E. Driscoll. Min. & Sci. Press, vol. 98, p. 388. 4½ columns. I.
- RECENT CYANIDE PRACTICE IN KOREA. By A. E. Drucker. Min. & Sci. Press, vol. 97, p. 458. 6 columns.
- CYANIDING AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89. 7 columns. I.
- CYANIDE PRACTICE AT MINAS DEL TAJO, SINALOA, MEXICO. By G. A. Tweedy and R. L. Beals. E. & M. J., vol. 89, p. 566. 12 columns. I.
- CYANIDE PRACTICE AT EL TAJO MILL, JALISCO, MEXICO. E. & M. J., vol. 89, p. 274. 1½ columns. I.

- THE CYANIDE PRACTICE AT THE EL ORO MILL, MEXICO. E. & M. J., vol. 87, p. 683. 23 columns. I.
- CYANIDING AT TAJO, ROSARIO, MEXICO. T. A. I. M. E., vol. 41, p. 339. 30 pages. I.
- NOTES ON THE CYANIDATION OF SILVER-GOLD ORES AT GUANAJUATO, MEXICO. By J. A. Reid. J. M. Soc. N. S., vol. 14, p. 37. 12½ pages.
- DEVELOPMENT OF THE CYANIDE PROCESS FOR SILVER ORES IN MEXICO. By B. Macdonald. E. & M. J., vol. 85, p. 802. 4½ columns.
- CYANIDATION OF SILVER ORES AT GUANAJUATO, MEXICO. By B. Macdonald. E. & M. J., vol. 85, p. 710. 23 columns. I.
- PRESENT CYANIDE PRACTICE IN MEXICO. By M. R. Lamb. E. & M. J., vol. 85, p. 703. 20 columns. I.
- CYANIDING AT THE NEW ESPERANZA MILL, EL ORO, MEXICO. E. & M. J., vol. 86, p. 760. 5 columns. I.
- SILVER CYANIDING IN MEXICO. E. & M. J., vol. 86, p. 846. ¾ column.
- SILVER CYANIDING IN MEXICO. By J. B. Empson. E. & M. J., vol. 86, p. 667. 3½ columns.
- CYANIDATION OF SILVER ORES, PACHUCA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 647. 18½ columns. I.
- CYANIDE TREATMENT AT THE JESUS MARIA AND FLORES MILLS. E. & M. J., vol. 86, p. 616. 10 columns.
- CYANIDING AT THE YOQUIVO MILL, WESTERN CHIHUAHUA. E. & M. J., vol. 90, p. 812. 1 column.
- SILVER CYANIDING AT THE SAN RAFAEL MILL, PACHUCA. By E. Girault. E. & M. J., vol. 90, p. 67. 6½ columns. I.
- CYANIDING ORES IN MEXICO. By E. Girault. M. & M., vol. 30, p. 618. 5 columns. I.
- CYANIDATION OF SILVER ORE IN MEXICO. By W. A. Caldecott. Min. & Sci. Press, vol. 97, p. 294. 5 columns.
- CYANIDATION IN MEXICO. By F. J. Hobson. Min. & Sci. Press, vol. 97, p. 159, 4 columns; p. 182, 6 columns, I.
- MILLING AND CYANIDE PRACTICE, SAN PROSPERO MILL, GUANAJUATO. Min. & Sci. Press, vol. 97, p. 130. 5 columns.
- CYANIDATION OF SILVER ORE IN MEXICO. By W. A. Caldecott. Min. & Sci. Press, vol. 96, p. 426, 4½ columns; p. 594, 4 columns, I.
- CYANIDATION OF PARRAL SILVER ORES. By H. T. Willis. Min. & Sci. Press, vol. 98, p. 488. 4 columns.
- CYANIDATION OF MANGANESE SILVER ORES OF MEXICO. By E. M. Hamilton. P. C. M. & M. Soc. S. A., vol. 10, p. 65. 3½ columns.
- THE CYANIDING OF SILVER ORES IN MEXICO. By A. F. J. Bordeaux. T. A. I. M. E., vol. 40, p. 764, 12 pages, I.; Discussion, p. 917, 2 pages.
- CYANIDING AT THE TONOPAH EXTENSION MILL. Min. & Sci. Press, vol. 100, p. 522. 4 columns.
- CYANIDING AT THE FLORENCE GOLD-FIELD MILL. E. & M. J., vol. 89, p. 367. 2 columns.
- CYANIDING AT THE MONTGOMERY-SHOSHONE MILL. By P. E. Saun. E. & M. J., vol. 89, p. 217. 4½ columns. I.
- CYANIDING AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 569. 8½ columns. I.
- CYANIDING AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 494. 8½ columns. I.
- CYANIDATION AT THE GOLDFIELD MILL. E. & M. J., vol. 86, p. 471. 6 columns. I.
- CYANIDING AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 96, p. 843. 1 column.
- CYANIDATION IN NEVADA. By A. G. Kirby. Min. & Sci. Press, vol. 96, p. 836. 8 columns.

- CYANIDATION IN NEVADA. By L. M. King. Min. & Sci. Press, vol. 96, p. 123. 5½ columns.
- CYANIDING THE ORES OF EASTERN OREGON. By A. Del Mar. E. & M. J., vol. 89, p. 667. 2 columns.
- CYANIDATION IN THE MALAY STATES. By H. F. Lofts. P. C. M. & M. Soc. S. A., vol. 8, p. 340. 3 columns.
- RECONSTRUCTION OF THE AUGUSTIAS CYANIDE MILL. By H. A. Megraw. E. & M. J., vol. 90, p. 321. 6 columns. I.
- CYANIDING AT THE ASHANTI GOLDFIELDS. E. & M. J., vol. 89, p. 459. 1½ columns.
- CYANIDATION AT MERCUR, UTAH. By L. A. Palmer. Min. & Sci. Press, vol. 98, p. 616. 7 columns. I.
- CYANIDING AT THE PITTSBURG SILVER PEAKS PLANT. Min. & Sci. Press, vol. 98, p. 659. 4½ columns.
- DIRECT CYANIDING ON THE RAND. E. & M. J., vol. 87, p. 883. ½ column.
- See also THE METALLURGY OF GOLD AND SILVER.
- See also COST OF METALLURGICAL TREATMENT.
- Cyaniding Plants**
- VARIABLES INFLUENCING CYANIDE PLANT DESIGN. By M. R. Lamb. E. & M. J., vol. 90, p. 8. 2½ columns. I.
- SMALL CYANIDE PLANTS. E. & M. J., vol. 86, p. 457. 1 column.
- HOMEMADE CYANIDE PLANT. P. C. M. & M. Soc. S. A., vol. 9, p. 278. 2 columns.
- CYANIDING AT THE MONTANA-TONOPAH MINING COMPANY'S PLANT. Min. & Sci. Press, vol. 97, p. 324. 7½ columns. I.
- CYANIDING AT THE NEVADA GOLD-FIELD REDUCTION WORKS. Min. & Sci. Press, vol. 97, p. 254. 2½ columns. I.
- THE STANDARD CONSOLIDATED CYANIDE MILL. By S. F. Shaw. E. & M. J., vol. 87, p. 483. 6½ columns. I.
- CYANIDING AT PLANT OF THE SIMMER DEEP AND JUPITER REDUCTION WORKS. Min. & Sci. Press, vol. 99, p. 397. 5 columns. I.
- A SKETCH OF THE SMALL CYANIDE PLANT AS ERRECTED AND WORKED IN RHODESIA. By F. J. Thomas. P. C. M. & M. Soc. S. A., vol. 10, p. 82, 7 columns; p. 207, 2½ columns.
- SLIME PLANT OF THE SIMMER DEEP AND JUPITER REDUCTION WORKS. Min. & Sci. Press, vol. 99, p. 398. 1½ columns.
- CYANIDE MILLS, GUANAJUATO DEVELOPMENT COMPANY. By C. T. Rice. E. & M. J., vol. 86, p. 947, 11½ columns, I.; p. 997, 15 columns, I.
- VETA COLORADO CYANIDE MILL, PARRAL, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 120. 8 columns.
- AN ALL-SLIME CYANIDE PLANT AT GUANAJUATO, MEXICO. By E. Shapley. E. & M. J., vol. 88, p. 68. 1½ columns.
- CYANIDE PLANT AND PRACTICE AT THE MINAS DEL TAJO, ROSARIO SINALOA, MEXICO. By G. A. Tweedy and R. L. Beals. T. A. I. M. E., vol. 41, p. 324. 56 pages. I.
- DESCRIPTION OF A CHEAP CYANIDE PLANT ERRECTED IN WESTERN AUSTRALIA. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 5, p. 23. 2½ columns.
- REGENERATING COPPER CYANIDE SOLUTION. By R. P. Wheelock. Min. & Sci. Press, vol. 100, p. 397. 3 columns.
- See also FINE CRUSHING BY MILLS, ETC.
- Chlorination Processes**
- CHLORINATION IN CALIFORNIA. By W. E. Darrow. Min. & Sci. Press, vol. 97, p. 609. 3½ columns.

REFINING GOLD BY CHLORINE GAS. Min. & Sci. Press, vol. 22, p. 278, 1½ columns; p. 297, 1½ columns.

THE MALM DRY CHLORINATION PROCESS. By R. L. Herrick. M. & M., vol. 30, p. 370. 9 columns. I.

MALM PROCESS IN COLORADO: A Dry Chlorination Process. By F. Rickard. Min. & Sci. Press, vol. 99, p. 662. 2½ columns.

DRY CHLORINATION OF SULPHIDE ORES By F. W. Traphagen. Min. & Sci. Press, vol. 98, p. 522. 2 columns. Table.

DRY CHLORINE PROCESS: The Chlorination of Complex Ores Containing Precious Metals, Together with Zinc, Lead and Iron. By F. W. Traphagen. M. & M., vol. 29, p. 449. 4½ columns.

CHLORINATION OF GOLD ORES; LABORATORY TESTS: Discussion of the paper by A. L. Sweetser, Trans., vol. 38, p. 236. T. A. I. M. E., vol. 39, p. 793. 2½ pages.

See also **COST OF METALLURGICAL TREATMENT.**

Refining Gold and Silver

FLUXING OF GOLD SLIMES. By C. E. Mayer. P. C. M. & M. Soc. S. A., vol. 5, p. 168, 4 columns; p. 211, 1½ columns; p. 341, ½ column; vol. 6, p. 17, 1 column.

TREATMENT OF THE GOLD AND SILVER PRECIPITATE AT DOS ESTRELLAS. By W. Neal. Min. & Sci. Press, vol. 98, p. 327. 2 columns.

SMELTING GOLD PRECIPITATES AND BULLION WITH OIL FUEL. By A. Yates. E. & M. J., vol. 88, p. 473. 3½ columns.

ELECTROLYTIC REFINING OF BULLION IN THE UNITED STATES MINTS. By H. J. Slaker. E. & M. J., vol. 90, p. 214. 2 columns.

ELECTROLYTIC REFINING OF GOLD. By B. T. K. Rose. Min. & Sci. Press, vol. 98, p. 890. 1 column.

THE CLEAN-UP, MELTING AND REFINING OF GOLD BULLION. By G. W. Williams. Min. & Sci. Press, vol. 95, p. 277. 5 columns.

REFINING OF SILVER BULLION CONTAINING ARSENIC AND ANTIMONY. By B. Neilly. J. C. M. I., vol. 11, p. 586. 6 pages. I.

BATTERY AND CYANIDE GOLD SMELTING. By A. Thomas. P. C. M. & M. Soc. S. A., vol. 9, p. 6, 6 columns; p. 50, 2 columns; p. 120, 5 columns; p. 162, 5½ columns; p. 191, 4 columns.

RESULTS OF BAG-HOUSE EXPERIMENTS IN CONNECTION WITH TAVENER'S PROCESS. By H. Rusden. P. C. M. & M. Soc. S. A., vol. 5, p. 288. 2 columns. I.

THE TAVENER PROCESS. By K. L. Graham. P. C. M. & M. Soc. S. A., vol. 5, p. 315. 2 columns.

See also **COST OF METALLURGICAL TREATMENT.**

Metallurgy of Iron and Steel

ABOUT SOME OF THE PROPERTIES OF STEEL. By A. E. Hunt. P. E. Soc. W. Pa., vol. 2, p. 271, 8 columns; p. 251, 6 pages.

THE SOLID NON-METALLIC IMPURITIES IN STEEL (SONIMS). By H. D. Hibbard. T. A. I. M. E., vol. 41, p. 803. 20 pages.

ON THE CHEMICAL CHANGES WHICH PIG IRON UNDERGOES DURING ITS CONVERSION INTO WROUGHT IRON. By F. C. Calvert. Min. Mag., vol. 9, p. 487. 6 pages.

THE DETERIORATING EFFECT OF "ACID PICKLE" ON STEEL RODS, AND THEIR PARTIAL RESTORATION ON "BAKING." P. C. M. & M. Soc. S. A., vol. 7, p. 424. 2½ columns.

NOTE ON SOME CAUSES OF RED-SHORTNESS AND COLD-SHORTNESS IN IRON. By W. Metcalf. P. E. Soc. W. Pa., vol. 2, p. 217. 2 columns; p. 219, 2 columns.

- CRYSTALLIZATION OF IRON AND STEEL.** By A. M. Johnston. P. C. M. & M. Soc. S. A., vol. 10, p. 3. 15 columns.
- ON THE COMPOUNDS OF CARBON AND IRON, AND THEIR INFLUENCE ON THE PRODUCTION OF PIG IRON.** By A. Gurlt. Min. Mag., vol. 8, p. 40, 7 pages; p. 123, 6 pages.
- CARBON AND THE PROPERTIES OF CAST IRON.** By H. M. Howe. E. & M. J., vol. 86, p. 943. 12 columns.
- THE CARBON-IRON DIAGRAM.** By H. M. Howe. T. A. I. M. E., vol. 39, p. 3. 68½ pages. I.
- A SIMPLE IDENTIFICATION TEST FOR IRON AND STEEL.** P. C. M. & M. Soc. S. A., vol. 10, p. 326. 3½ columns.
- HEAT TREATMENT OF STEEL RAILS,** By W. Metcalf. P. E. Soc. W. Pa., vol. 24, p. 135. 19½ pages. I.
- MALLEABLE CAST IRON.** By B. Stoughton. Sch. Mines Quart., vol. 29, p. 54. 9 pages.
- STEEL CASTINGS.** P. E. Soc. W. Pa., vol. 25, p. 333. 21 pages. I.
- EXTRACTION OF IRON FROM ORE AND PULP.** By W. C. Brown. E. & M. J., vol. 90, p. 445. 1 column. I.
- SEPARATION OF SILICA AND ALUMINA IN IRON ORES.** E. & M. J., vol. 86, p. 168. 1 column.
- INFLUENCE OF TOP-LAG ON THE DEPTHS OF THE PIPE IN STEEL INGOTS.** By H. M. Howe. T. A. I. M. E., vol. 40, p. 804. 2½ pages.
- SEGREGATION IN STEEL INGOTS.** By H. M. Howe. Sch. Mines Quart., vol. 29, p. 238. 3 pages.
- THE INFLUENCE OF INGOT-SIZE ON THE DEGREE OF SEGREGATION IN STEEL INGOTS.** By H. M. Howe. T. A. I. M. E., vol. 40, p. 644. 4 pages. I.
- PIPING AND SEGREGATION IN STEEL INGOTS:** Discussion of H. M. Howe's Paper. T. A. I. M. E., vol. 38, p. 924. 11 pages. I.
- THE INFLUENCE OF THE CONDITIONS OF CASTING ON PIPING AND SEGREGATION, AS SHOWN BY MEANS OF WAX INGOTS.** By H. M. Howe and B. Stoughton. T. A. I. M. E., vol. 38, p. 109. 17 pages. I.
- PIPING AND SEGREGATION IN STEEL INGOTS.** By Henry M. Howe. T. A. I. M. E., vol. 38, p. 3. 105 pages. I.
- PIPING AND SEGREGATION IN STEEL INGOTS:** Discussion of the paper of H. M. Howe. Trans., vol. 38, p. 3. T. A. I. M. E., vol. 39, p. 818. 32½ pages. I.
- PIPING AND SEGREGATION IN STEEL INGOTS:** Discussion of Paper of H. M. Howe, vol. 38, pp. 3 and 924; vol. 39, p. 818. T. A. I. M. E., vol. 40, p. 821. 10 pages. I.
- BLOW-HOLES IN STEEL INGOTS.** By E. Von Mallitz. T. A. I. M. E., vol. 38, p. 412. 34 pages.
- STEEL HARDENING METALS.** By J. H. Pratt. U. S. G. S., Mineral Resources, 1903; Mineral Resources, 1904, 58 pages.
- COPPER-CLAD STEEL.** By W. Tassin. E. & M. J., vol. 88, p. 813. 3½ columns.
- CUPRO-NICKEL STEEL.** By G. H. Clamer. E. & M. J., vol. 90, p. 215. 2 columns.
- NEW FORMS OF STEEL FOR NEW USES.** By R. B. Woodworth. P. E. Soc. W. Pa., vol. 24, p. 40. 50 pages. I.
- LABORATORY METHODS FOR MAKING ALLOYS OF IRON AND VANADIUM.** By W. L. Morrison. E. & M. J., vol. 87, p. 1035. 1½ columns. I.
- VANADIUM STEEL.** By J. K. Smith. P. E. Soc. W. Pa., vol. 23, p. 423. 26 pages.
- VANADIUM STEEL.** M. & M., vol. 31, p. 334. 1½ columns.
- MANGANESE STEEL.** By W. S. Potter. J. W. Soc. E., vol. 14, p. 212. 28 pages. I.
- THE USE OF FERRO-ALLOYS.** E. & M. J., vol. 85, p. 363. ¼ column.

- SOME EXPERIMENTS ON SMELTING TITANIFEROUS IRON ORE. By G. H. Stanley. P. C. M. & M. Soc. S. A., vol. 10, p. 162, 19½ columns, I.; p. 345, 11½ columns, I.; p. 253, 2 columns.
- THE RELATION OF SLOW DRIVING TO FUEL-ECONOMY IN IRON BLAST FURNACE PRACTICE. By J. B. Miles. T. A. I. M. E., vol. 39, p. 540. 4½ pages.
- THE WORK OF THE TESTING DEPARTMENT OF THE WATERTOWN ARSENAL, IN ITS RELATION TO THE METALLURGY OF STEEL. By J. E. Howard. T. A. I. M. E., vol. 39, p. 223. 5½ pages.
- THE WORK OF THE TESTING DEPARTMENT OF THE WATERTOWN ARSENAL IN ITS RELATION TO THE METALLURGY OF STEEL: Discussion of the Paper of J. E. Howard, p. 223. T. A. I. M. E., vol. 39, p. 859. 32½ pages. I.
- THE UNIFORM NOMENCLATURE OF IRON AND STEEL: Discussion of the Report of Committee 24 of the International Association for Testing Material, presented at the Brussels Congress, 1906, and republished in Bi-monthly Bulletin, No. 20, March, 1908, pp. 227-237, but not included in this volume. T. A. I. M. E., vol. 39, p. 924. 6 pages.
- THE AIR-FURNACE PROCESS OF PREPARING WHITE CAST IRON FOR THE MALLEABILIZING PROCESS. By H. M. Howe and Enrique Gouceda. T. A. I. M. E. vol. 39, p. 765. 9½ pages. D.
- OXYGEN PROCESS FOR MELTING OF IRON. By A. Gradenwitz. M. & M., vol. 31, p. 146. 4 columns. I.
- A NEW MARTIN FURNACE WITH DOUBLE HEARTH. E. & M. J., vol. 88, p. 728. 3½ columns. I.
- ORE HANDLING BRIDGE AT DUQUESNE STEEL WORKS. E. & M. J., vol. 87, p. 944. 2 columns. I.
- THE ROLLING OF SPECIAL SECTIONS OF IRON AND STEEL. By W. McKee. J. W. Soc. E., vol. 14, p. 729. 15 pages. I.
- CALCINATION ("RUCKING") OF IRON-STONE IN NORTH STRAFFORDSHIRE, ENGLAND. T. I. M. E., vol. 27, p. 107. 5 pages. I.
- ROASTING AND SMELTING PLANT AT LONDONDERRY IRON WORKS. By R. G. Leckie. J. M. Soc. N. S., vol. 1, p. 50, pt. 3. 2½ pages.
- NATIVE IRON SMELTING IN HAUTE GUINÉE (WEST AFRICA). By J. M. Campbell. T. I. M. & M., vol. 19, p. 458. 5 pages. I.
- IRON AND STEEL WORKS AT HANYANG, HUPE, CHINA. By A. J. Seltzer. E. & M. J., vol. 89, p. 1231. 10 columns. I.
- THE UNITED STATES STEEL CORPORATION. By F. Hobart. E. & M. J., vol. 87, p. 659. 7½ columns.
- INTRODUCTION OF THE THOMAS BASIC STEEL PROCESS IN THE UNITED STATES. By G. W. Maynard. T. A. I. M. E., vol. 41, p. 280, 16 pages; p. 903, 1 page.
- THE COLLOSEUS PROCESS FOR MAKING SLAG CEMENT. By F. A. Talbot. E. & M. J., vol. 90, p. 608. 4½ columns. I.
- ON THE PROGRESS AND PRESENT CONDITION OF THE MANUFACTURE OF IRON IN THE UNITED STATES. By E. F. Pletschke. Min. Mag., vol. 10, p. 223. 6 pages.
- ON THE MANUFACTURE OF STEEL. Min. Mag., vol. 5, p. 296. 10½ pages.
- THE IRON MANUFACTURE OF GREAT BRITAIN. By W. Truran. Min. Mag., vol. 5, p. 459, 21½ pages, I.; vol. 6, p. 1, 14 pages; p. 225, 11½ pages, I.; p. 304, 11½ pages; p. 398, 11½ pages.
- MANUFACTURE OF WROUGHT STEEL. Min. Mag., vol. 10, p. 216. 5 pages.

- RECENT DEVELOPMENTS IN THE METALLURGY OF IRON.** By B. Neumann. E. & M. J., vol. 89, p. 1068. 9 columns.
- THE PRESENT TECHNICAL CONDITION OF THE STEEL INDUSTRY OF THE UNITED STATES.** By P. Barnes. U. S. G. S., Bull. 25. 85 pages. 1885.
- IRON STEEL AT CLOSE OF NINETEENTH CENTURY.** By J. M. Swank. U. S. G. S., Mineral Resources, 1900.
- TWENTY YEARS' PROGRESS IN IRON AND STEEL MANUFACTURE IN UNITED STATES.** By J. M. Swank. U. S. G. S., Mineral Resources, 1891. 37 pages.
- MANUFACTURE OF IRON AND STEEL; AND IRON ORES OF THE UNITED STATES.** By J. M. Swank. U. S. G. S., Mineral Resources 1883-1884, vol. 14.
- PIG IRON PRODUCTION FOR 100 YEARS.** E. & M. J., vol. 90, p. 1263. $\frac{1}{2}$ column.
- SOUTHERN RESOURCES FOR MANUFACTURE OF IRON AND STEEL.** By J. Birkinbine. U. S. G. S., Mineral Resources, 1886, vol. 8. 4 pages.
- HISTORY OF THE DEVELOPMENT OF THE MANUFACTURE OF IRON AND STEEL SHEETS.** By S. M. Kinter. P. E. Soc. W. Pa., vol. 23, p. 147. 35 pages. I.
- MANUFACTURE OF IRON BLOOMS.** By J. T. Hodge. Min. Mag., vol. 2, p. 244. 5 pages. I.
- IRON AND STEEL FROM BLACK SANDS.** P. C. M. & M. Soc. S. A., vol. 7, p. 418. $3\frac{1}{2}$ columns.
- THE IRON MANUFACTURE OF GREAT BRITAIN: Theoretically and Practically Considered.** By W. Truran. Min. Mag., vol. 8, p. 105, 16 pages; p. 203, 17 pages; p. 301, 20 pages; p. 399, $16\frac{1}{2}$ pages; p. 495, 12 pages; vol. 7, p. 38, 20 pages; p. 125, 25 pages; p. 234, 11 pages; p. 334, $10\frac{1}{2}$ pages; p. 425, 20 pages.
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- THE IRON AND STEEL INDUSTRY OF THE PROVINCE OF ONTARIO, CANADA.** By J. G. Barmelee. J. C. M. I., vol. 11, p. 125. 25 pages. I.
- EARLY IRON MAKING IN BRAZIL.** By O. A. Derby. E. & M. J., vol. 88, p. 1112. 2 columns.
- IRON MAKING IN AUSTRALIA.** By A. Selwyn-Brown. E. & M. J., vol. 85, p. 601. $2\frac{1}{2}$ columns.
- STEEL MAKING IN CHINA.** By T. T. Read. Min. Mag., London, vol. 2, p. 199. 11 columns. I.
- STEEL INDUSTRY OF THE TRANSVAAL.** By D. F. Campbell. Min. Mag., London, vol. 2, p. 54. 4 columns. I.
- TOOL STEEL MAKING IN STYRIA.** By R. F. Böhler. Sch. Mines Quart., vol. 29, p. 329. $12\frac{1}{2}$ columns. I.
- See also **THE IRON TRADE, and ELECTRO-METALLURGY, also COST OF METALLURGICAL TREATMENT.**
- Iron Blast Furnace Method, Etc.**
- THE DESSICATION OF FURNACE AIR.** M. & M., vol. 31, p. 723. $6\frac{1}{2}$ columns. I.
- DRY AIR BLAST IN STEEL MAKING.** P. C. M. & M. Soc. S. A., vol. 9, p. 217. $\frac{1}{2}$ column.
- IMPROVEMENTS IN THE DRY AIR BLAST.** E. & M. J., vol. 88, p. 1170. $3\frac{1}{2}$ columns. I.
- GAYLEY DRY AIR BLAST AT WARWICK FURNACE.** By E. B. Cook. E. & M. J., vol. 86, p. 810. 11 columns.
- GAYLEY'S INVENTION OF THE DRY BLAST.** By R. W. Raymond. E. & M. J., vol. 86, p. 1200. $8\frac{1}{2}$ columns.

- GAYLEY'S INVENTION OF THE DRY BLAST.** By R. W. Raymond. T. A. I. M. E., vol. 39, p. 695. 10 pages.
- EXPERIENCE WITH THE GAYLEY DRY BLAST AT THE WARWICK FURNACES, POTTSTOWN, PENNSYLVANIA.** By E. B. Cook. T. A. I. M. E., vol. 39, p. 705. 17½ pages. I.
- EXPERIENCE WITH THE GAYLEY DRY BLAST AT THE WARWICK FURNACES, POTTSTOWN, PENNSYLVANIA.** Discussion of the Paper of E. B. Cook, p. 705. T. A. I. M. E., vol. 39, p. 922. 2 pages.
- NOTES ON THE GAYLEY DRY-AIR BLAST-PROCESS:** Discussion of C. A. Meissner's Paper. T. A. I. M. E., vol. 38, p. 901. 11 pages. D.
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- THE SHAPE OF THE IRON BLAST FURNACE.** By H. M. Howe. E. & M. J., vol. 86, p. 507. 13½ columns. I.
- BLAST PRESSURE AT THE TUYERES AND INSIDE THE FURNACE.** By R. H. Sweeter. T. A. I. M. E., vol. 40, p. 247. 6 pages. I.
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- AMERICAN BLAST FURNACE PROGRESS.** E. & M. J., vol. 88, p. 1219. 1½ columns.
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- THE COMBUSTION-TEMPERATURE OF CARBON AND ITS RELATION TO BLAST FURNACE OPERATION.** By C. P. Linville. T. A. I. M. E., vol. 41, p. 269. 11½ pages. D.
- DEVELOPMENT IN THE SIZE AND SHAPE OF BLAST FURNACES IN THE LEHIGH VALLEY, AS SHOWN BY THE FURNACES AT THE GLENDON IRON WORKS.** By F. Firmstone. T. A. I. M. E., vol. 40, p. 459. 16 pages. I.
- BLAST FURNACE PRACTICE:** Discussion of T. F. Witherbee Paper. T. A. I. M. E., vol. 38, p. 887. 13 pages.
- IRON MANUFACTURE: Economy in Its Production; Improved Form of Blast Furnace.** Min. Mag., vol. 10, p. 415. 6 pages. I.
- PREPARATION OF MATERIALS FOR THE BLAST FURNACE.** By D. Baker. E. & M. J., vol. 85, p. 609. 5½ columns.
- THE DISTRIBUTION OF IRON BLAST FURNACES IN THE UNITED STATES.** E. & M. J., vol. 90, p. 160. Table and Map.
- See also **THE IRON TRADE.**
- Electro-Metallurgy of Iron and Steel**
- TOOL STEEL DIRECT FROM THE ORE IN AN ELECTRIC FURNACE.** By A. Stansfield. J. C. M. I., vol. 13, p. 151. 11½ pages. I.
- POSSIBILITIES IN THE ELECTRIC SMELTING OF IRON ORES.** By A. Stansfield. J. C. M. I., vol. 11, p. 180. 8 pages.
- THE ELECTROTHERMIC PRODUCTION OF STEEL FROM IRON ORE.** By A. Stansfield. J. C. M. I., vol. 10, p. 127. 4½ pages.
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- THE TREATMENT OF STEEL IN ELECTRIC FURNACES.** By H. M. Howe. E. & M. J., vol. 88, p. 400. 21 columns. I.
- ELECTRICAL REDUCTION OF IRON.** By J. W. Richards. Min. & Sci. Press, vol. 100, p. 549. 8 columns. I.
- ELECTRIC SMELTING OF IRON ORE IN SWEDEN.** E. & M. J., vol. 88, p. 474. 1½ columns.
- THE REDUCTION OF IRON ORES IN THE ELECTRIC FURNACE.** By R. Turnbull. J. C. M. I., vol. 11, p. 173. 6 pages.
- ELECTRIC SMELTING OF IRON ORE.** By C. E. Elwell. Min. & Sci. Press, vol. 97, p. 846. 1 column.
- THE ELECTRICAL SMELTING OF IRON ORES.** By R. L. Phelps. Min. & Sci. Press, vol. 95, p. 87. 4½ columns. I.
- THE GIROD ELECTRIC FURNACE AND THE FRENCH WORKS USING THE PAUL GIROD STEEL PROCESS.** By W. Borchers. T. A. I. M. E., vol. 41, p. 120. 18½ pages. I.
- Metallurgy of Lead**
- REMARKS ON THE PROCESS FOR SMELTING LEAD.** By A. Trippel. Min. Mag., vol. 4, p. 36. 12 pages.
- EARLY SMELTING AT CERRO GORDO.** By F. Drake. Min. & Sci. Press, vol. 100, p. 745. 2½ columns.
- A PROPOSED NEW METHOD OF SMELTING LEAD CONCENTRATES.** By H. F. Collins. T. Au. I. M. E., vol. 4, p. 124. 7½ pages.
- HANDLING BLAST FURNACE BULLION AT THE SELBY SMELTING WORKS.** By J. C. Bennett. E. & M. J., vol. 86, p. 83. 5 columns. I.
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- LEAD SLAGS.** By M. W. Iles. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- LEAD AND COPPER SLAGS.** By J. A. Bart. Min. & Sci. Press, vol. 101, p. 602. 6½ columns.
- THE ROBINSON NON-SLAGGING TUYERE.** E. & M. J., vol. 85, p. 251. 1 column. I.
- ALTERING THE CAPACITY OF A BLAST FURNACE.** By T. Kapp. E. & M. J., vol. 90, p. 595. ¼ column.
- SYSTEM OF MIXING ORE PREPARATORY TO SMELTING.** E. & M. J., vol. 89, p. 648, ¼ column. I.
- LOSS BY LEAKAGE OF BLAST IN LEAD AND COPPER FURNACES.** E. & M. J., vol. 86, p. 756. 1 column. I.
- THE MANUFACTURE OF SUBLIMED WHITE LEAD.** By J. I. Blair. E. & M. J., vol. 90, p. 906. 7 columns. I.
- THE ELECTROLYTIC TREATMENT OF GALENA.** By E. F. Kern and H. S. Auerbach. Sch. Mines Quart., vol. 29, p. 63. 19½ pages.
- METALLIC LEAD FROM GALENA BY AN ELECTROLYTIC PROCESS.** E. & M. J., vol. 89, p. 715. 1 column. I.
- ELECTROLYTIC REFINING OF LEAD-ANTIMONY ALLOY.** E. & M. J., vol. 87, p. 892. ¼ column.
- See also **ELECTRO-METALLURGY.**
- THE BAG HOUSE AT SELBY, CALIFORNIA.** By J. C. Bennett. E. & M. J., vol. 86, p. 451. 16½ columns. I.
- THE BAG HOUSE AND ITS RECENT APPLICATIONS.** By W. C. Ebaugh. E. & M. J., vol. 88, p. 1020. 6 columns. I.
- THE REFINING OF BASE BULLION AT PORT PIRIE AND TREATMENT OF BY-PRODUCTS.** By B. B. Bayly. T. Au. I. M. E., vol. 12, p. 79. 26 pages. I.
- NOTE ON THE REFINING OF BASE BULLION.** By W. Bowling. P. C. M. & M. Soc. S. A., vol. 5, p. 225, 6 columns; p. 263, 3½ columns; p. 313, 1½ columns; p. 341, 4 columns; vol. 6, p. 19, ¼ column; p. 49, 4 columns; p. 169, 3 columns.

- A FEW NOTES ON THE REFINING OF BASE BULLION.** By C. W. Lee and W. O. Brunton. P. C. M. & M. Soc. S. A., vol. 7, p. 358, 5 columns, I.; vol. 8, p. 52, 1 column; p. 80, $\frac{1}{2}$ column; p. 121, $\frac{1}{2}$ column.
- THE REFINING OF BASE LEAD BULLION CONTAINING SILVER, AND HIGH IN GOLD.** By G. H. Blakemore. T. Au. I. M. E., vol. 5, p. 221. 38 pages.
- A FEW NOTES ON THE CUPELLING GOLD-LEAD BULLION.** By Geo. Melvill. P. C. M. & M. Soc. S. A., vol. 9, p. 157, 3 $\frac{1}{2}$ columns; p. 345, $\frac{1}{2}$ column.
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- TRAIL SMELTER AND LEAD REFINERY.** By J. M. Turnbull. M. & M., vol. 31, p. 121. 10 columns. I.
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- SMELTING THE LEAD ORE OF THE CŒUR D'ALENE REGION.** Min. & Sci. Press, vol. 96, p. 627. 14 columns. I.
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- GUADALOPE QUICKSILVER WORKS.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 446. 4 columns. I.
- See also **COST OF METALLURGICAL TREATMENT.**
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THE McDougall Roasting Furnace. By L. S. Austin. Min. & Sci. Press, vol. 95, p. 280. 4½ columns. I.

A MAKESHIFT ROASTING FURNACE. By H. W. Ross. Min. & Sci. Press, vol. 96, p. 527. 1½ columns.

THE WILFLEY FURNACE. By J. M. McCleave. E. & M. J., vol. 85, p. 453. 3½ columns. I.

COMBINED ROASTING AND SMELTING FURNACE. Min. & Sci. Press, vol. 22, p. 257. 3 columns. I.

THE BAILEY ROASTING FURNACE. Min. & Sci. Press, vol. 22, p. 297. 3 columns. I.

THE DWIGHT AND LLOYD SINTERING PROCESS. By A. S. Dwight. E. & M. J., vol. 85, p. 649. 11 columns. I.

THE DESULPHURIZATION OF METALLIFEROUS SULPHATES, OR DR. HOLLAND'S PROCESS. By O. M. Lieber. Min. Mag., vol. 3, p. 168. 6½ pages.

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ROASTING AT KALGOORLIE. Min. & Sci. Press, vol. 101, p. 50. 4 columns. I.

ROASTING THE JAMESONITE ORES, BLACK HILLS, SOUTH DAKOTA. E. & M. J., vol. 87, p. 891. ¾ column.

THE ROASTING OF TELLURIDE ORES. By R. L. Mack and G. H. Scibbid. Min. & Sci. Press, vol. 95, p. 751. 6½ columns; p. 777, 9 columns. I.

SINTERING AT CERRO DE PASCO. Min. & Sci. Press, vol. 98, p. 195. 1½ columns. I.

See also **METALLURGY OF GOLD AND SILVER, METALLURGY OF LEAD, METALLURGY OF COPPER, ETC.**

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DUST EXTRACTION FROM SMELTER SMOKE. Min. & Sci. Press, vol. 101, p. 108. 2 columns. I.

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- RECOVERY OF FLUE DUST.** By C. W. Goodale. E. & M. J., vol. 89, p. 368. 1½ columns.
- A CONCRETE BLOCK CHIMNEY.** Min. & Sci. Press, vol. 97, p. 468. 1 column. I.
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- THE DEPOSITION OF FLUE DUST.** By C. F. Shelby. E. & M. J., vol. 85, p. 204. 3 columns.

Metallurgy of Tin

- THE ASSAY OF TIN ORES.** By J. Gray. P. C. M. & M. Soc. S. A., vol. 10, p. 312, 6½ columns; p. 402, 2½ columns.

SMELTING THE TIN ORES IN THE YUNNAN DISTRICT, CHINA. T. I. M. & M., vol. 19, p. 192. 2 pages. I.

THE METALLURGICAL TREATMENT OF COMPLEX TIN SULPHIDES. By P. J. Thibault. T. Au. I. M. E., vol. 8, pt. 2, p. 155. 8½ pages.

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RECENT ADVANCES IN THE ELECTRO-METALLURGY OF ZINC. By F. Peters. E. & M. J., vol. 89, p. 1017. 7½ columns. I.

ELECTRIC ZINC SMELTING. By F. T. Snyder. Min. & Sci. Press, vol. 95, p. 720. 1½ columns.

ELECTRIC FURNACE FOR ZINC SMELTING. By F. A. J. Fitzgerald. M. & M., vol. 31, p. 703. 2½ columns. I.

TREATMENT OF COMPLEX ZINC SULPHIDE ORES AT OKER, GERMANY. By H. Pope. E. & M. J. vol. 89, p. 819. 6½ columns.

PHYSICAL FACTORS IN THE METALLURGICAL REDUCTION OF ZINC OXIDE By W. McA. Johnson. T. A. I. M. E., vol. 38, p. 656. 7½ pages.

PRESENT ZINC SMELTING CONDITIONS. By R. G. Hall. Min. & Sci. Press, vol. 101, p. 299. 2½ columns.

A METHOD FOR THE RECOVERY OF ZINC FROM SOLUTIONS OF SULPHATE. By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 87, 6 columns; p. 209, 2 columns; p. 240, 2 columns.

ZINC SMELTING FOR PIGMENTS. By E. W. Buskett. Min. & Sci. Press, vol. 97, p. 604. 3 columns. I.

FUME FILTRATION FOR PRODUCTION OF PURE SPELTER. By J. S. G. Primrose. E. & M. J., vol. 90, p. 415. 11 columns. I.

SMELTING BRIQUETTED ZINC ORE. By T. J. Hoover. E. & M. J., vol. 90, p. 323. 6 columns.

CHARGING AND CLEANING MACHINE FOR ZINC FURNACES. By O. Saeger.

E. & M. J., vol. 89, p. 780. 4½ columns. I.

See also **COST OF METALLURGICAL TREATMENT.**

Miscellaneous Information

THE RELATIONS BETWEEN MINERS AND SMELTERS. E. & M. J., vol. 85, p. 222. 4½ columns.

CALCULATION OF HEAT CONDUCTIVITIES. By C. Hering. Min. & Sci. Press, vol. 98, p. 357. 1½ columns.

ELECTRIC HEAT VS. HEAT FROM FUEL. Min. & Sci. Press, vol. 95, p. 246. 2 columns.

WASTE OF HEAT AND MATERIALS IN SMELTING WORKS. By H. Lang. E. & M. J., vol. 88, p. 916. 8½ columns.

FUSION TABLE OF MINERALS IN THE OXYGEN-GAS BLOWPIPE FLAME. By L. M. Luquer. Sch. Mines Quart., vol. 29, p. 179. 4 pages.

PRACTICAL PYROMETRY. By R. S. Whipple. J. W. Soc. E., vol. 12, p. 169. 34 pages. I.

ADJUSTABLE PYROMETER STAND. By L. W. Bahney. Min. & Sci. Press, vol. 98, p. 629. 2½ columns. I.

AN ADJUSTABLE PYROMETER STAND. By L. W. Bahney. T. A. I. M. E., vol. 40, p. 760. 4 pages. I.

MEASURING INDUSTRIAL TEMPERATURES. By T. T. Read. Min. & Sci. Press, vol. 95, p. 712. 6½ columns. I.

SHAPE BRICK AND METHODS OF CALCULATING REQUIREMENTS FOR FURNACE WORK. By N. Peters. E. & M. J., vol. 87, p. 447. 8½ columns. I.

USE OF BASIC REFRACTORY BRICK IN METALLURGY. By F. T. Havard. E. & M. J., vol. 86, p. 802. 6½ columns.

THE HAVARD COAL METER: An Apparatus for Measuring Coal on Way to Furnace. M. & M., vol. 30, p. 728. 1 column. I.

- BLAST FURNACE TUYERE.** By L. S. Austin. Min. & Sci. Press, vol. 98, p. 392. $\frac{1}{2}$ column. I.
- THE UTILIZATION OF WASTE HEAT CONTAINED IN SLAGS FROM SMELTING FURNACES.** By J. Howell and E. A. Ashcroft. T. Au. I. M. E., vol. 1, p. 66. $4\frac{1}{2}$ pages. I.
- FURNACE CHARGING.** By G. F. Beardsley. Min. & Sci. Press, vol. 95, p. 593. $2\frac{1}{2}$ columns.
- AGGLOMERATING ORE-FINES AND FLUE DUST.** By H. Haas. E. & M. J., vol. 90, p. 814. $11\frac{1}{2}$ columns. I.
- OLD AND NEW METHODS OF GALVANIZING.** By A. Sang. P. E. Soc. W. Pa., vol. 23, p. 546. 25 pages.
- ELECTROCEMENTIZING:** Deposition of Metal by Cementation on Other Metal. By A. Sang. M. & M., vol. 30, p. 408. $3\frac{1}{2}$ columns. I.
- THE ROOT POSITIVE BLAST BLOWER.** By L. S. Austin. Min. & Sci. Press, vol. 99, p. 432. 2 columns.
- RELATION BETWEEN THE ASSAY-VALUE OF MILL PRODUCTS AND SMELTER CONTRACTS.** By G. Caetani. Min. & Sci. Press, vol. 96, p. 25. $3\frac{1}{2}$ columns.
- NOISELESS FURNACE FOR BURNING CRUDE OIL AND A CRUDE OIL BURNER.** E. & M. J., vol. 87, p. 889. $\frac{1}{2}$ column. I.
- INVESTIGATION OF FERRO-BORON.** By K. Iwai and J. C. Ballagh. Min. & Sci. Press, vol. 99, p. 185. $11\frac{1}{2}$ columns. I.
- EFFICIENCY OF HEAT DRYERS.** By W. B. Ruggles. Min. & Sci. Press, vol. 100, p. 456. 1 column.
- SAND BOILS.** By J. J. F. Brand. E. & M. J., vol. 87, p. 457. 3 columns.
- HOUSING CONDITIONS AT THE GARFIELD SMELTER.** By L. S. Austin. Min. & Sci. Press, vol. 100, p. 577. $3\frac{1}{2}$ columns. I.
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- AN IMPROVEMENT IN TIPPING POTS DURING SMELTING.** By W. D. Lloyd. P. C. M. & M. Soc. S. A. vol. 8, p. 166. 2 columns. I.
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- ECONOMY IN CUPOLA SMELTING.** By J. W. Henderson. P. E. Soc. W. Pa., vol. 25, p. 313. 20 pages. I.
- CUPOLA SMELTING IN ARIZONA.** By J. Douglas, Jr. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- THE BESSEMERIZING OF HARDHEAD.** By D. M. Levy and D. Ewen. T. I. M. & M., vol. 18, p. 466. 16 pages. I.
- THE TREATMENT OF SULPHIDE ORES IN VICTORIA.** By S. Radcliff and J. Drevermann. T. Au. I. M. E., vol. 13, p. 132. 5 pages.
- TREATMENT OF COMPLEX SULPHIDES.** By D. Clark. Min. Mag., London, vol. 2, p. 56. 4 columns. I.
- METALLURGICAL SLEUTHING.** By E. B. Wilson. M. & M., vol. 31, p. 476. 3 columns.

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"FIRE" GOLD. Min. & Sci. Press, vol. 96, p. 68. Note.

THE ALLOYS OF GOLD AND TELLURIUM. By T. K. Rose. T. I. M. & M., vol. 17, p. 285. 8 pages.

"GREEN" GOLD. By F. A. Leach. Min. & Sci. Press, vol. 95, p. 363. 1 column.

GREEN GOLD. By F. A. Leach. Min. & Sci. Press, vol. 96, p. 195. ¾ column.

NATURE OF GOLD IN ALLUVIALS. By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 760. 4 columns.

COLLECTING PRECIOUS METAL DUST. E. & M. J., vol. 87, p. 863. 1½ columns. I.

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See also THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING, and THE OCCURRENCE OF GOLD.

QUANTITATIVE DETERMINATION OF SILVER BY MEANS OF THE MICROSCOPE. By J. S. Curtis. U. S. G. S., 6th Ann. Rept., pp. 323-352. 1884-85. I.

ALLOYS OF GOLD AND TELLURIUM. E. & M. J., vol. 86, p. 567. 1½ columns.

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- CONTRIBUTIONS TO THE MINERALOGY OF THE PACIFIC COAST.** By W. H. Melville and W. Lindgren. U. S. G. S., Bull. 61. 40 pages. I. 1890.
- CONTRIBUTIONS TO THE MINERALOGY OF THE ROCKY MOUNTAINS.** By W. Cross. U. S. G. S., Bull. 20. 114 pages. I. 1885.
- THE MICROSTRUCTURE OF A COMPLEX ORE FROM THE FRISCO MINE, IDAHO.** By Wm. Campbell. E. & M. J., vol. 87, p. 260. 3½ columns. I.
- A NEW METALLOGRAPHIC MICROSCOPE.** By W. Campbell. Sch. Mines Quart., vol. 31, p. 241. 5 pages. I.
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- GEOLOGY AND PETROGRAPHY OF CRATER LAKE, NATIONAL PARK.** By J. S. Diller and H. B. Patton. U. S. G. S., Professional Paper 3. 167 pages. I. 1902.
- A MINERALOGICAL LEXICON OF FRANKLIN, HAMPSHIRE, AND HAMPDEN COUNTIES, MASSACHUSETTS.** By B. K. Emerson. U. S. G. S., Bull. 126. 180 pages. I. 1895.
- THE EDUCATIONAL SERIES OF ROCK SPECIMENS COLLECTED AND DISTRIBUTED BY THE UNITED STATES GEOLOGICAL SURVEY.** By J. S. Diller. U. S. G. S., Bull. 150. 400 pages. I. 1898.
- GRAVIMETRIC DETERMINATION OF BARIUM.** M. & M., vol. 29, p. 539. ½ column.
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- CRYSTALLOGRAPHIC STUDY OF THE THINOLITE OF LAKE LAHONTAN.** By E. S. Dana. U. S. G. S., Bull. 12. 34 pages. I. 1884.
- RADIUM EMANATION.** By F. H. Mason. Min. & Sci. Press, vol. 96, p. 425. 3½ columns. D.
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A FULGURITE FROM THE RARITAN SANDS OF NEW JERSEY WITH AN HISTORICAL SKETCH AND BIBLIOGRAPHY OF FULGURITES IN GENERAL. By W. L. Burrows. Sch. Mines Quart., vol. 31, p. 294. 26 pages.

MAGNESITE. By C. G. Yale. E. & M. J., vol. 85, p. 110. ¼ columns.

PHOSPHORUS. By G. W. Stose. U. S. G. S., Mineral Resources, 1906. 7 pages.

RADIUM IN THE ROCKS OF THE SIMPLON. Min. & Sci. Press, vol. 95, p. 683. ½ column.

RADIUM AND RADIOACTIVITY. By L. F. Miller. M. & M., vol. 31, p. 732. 5½ columns. I.

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THE TREADWELL ORES. U. S. G. S., Bull. 259, p. 77. 1 page.

RESEARCHES UPON THE TELLURIDE GOLD ORES OF CRIPPLE CREEK, COLORADO. By T. B. Crowe. P. C. M. & M. Soc. S. A., vol. 9, p. 398. 6 columns.

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RICH ORES OF GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 96, p. 774. 6 columns.

ORES OF GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 97, p. 50. 7½ columns.

CHARACTER OF GOLDFIELD ORES. E. & M. J., vol. 86, p. 1098. 5½ columns.

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PHYSICAL PROPERTIES OF THE IRON-CARBURETS. By C. Barus and V. Strouhal. U. S. G. S., Bull. 35. 62 pages. 1886.

THE NEVADA METEORITE. By W. P. Jenney. Min. & Sci. Press, vol. 98, p. 93. 3½ columns. I.

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RESEARCHES IN DIAMOND MAKING. By F. H. Mason. Min. & Sci. Press, vol. 97, p. 773. 3½ columns. I.

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FIRE-RESISTIVE PROPERTIES OF VARIOUS BUILDING MATERIALS. By R. L. Humphrey. U. S. G. S., Bull. 370. 99 pages. I. 1909.

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FOUNDATIONS FOR RIVER BRIDGE PIERS. By P. F. Brendlinger. P. E. Soc. W. Pa., vol. 2, p. 255. 16 pages. I.

FOUNDATION WORK FOR C. & N. W. RAILROAD BRIDGE ACROSS THE MISSISSIPPI RIVER AT CLINTON, IOWA. By M. Deutsch. Sch. Mines Quart., vol. 30, p. 308. 14 pages. I.

FOUNDATION OF THE GOLDFIELD CONSOLIDATED MILL. By P. E. Barbour. E. & M. J., vol. 87, p. 1173. $9\frac{1}{2}$ columns. I.

FOUNDATION FOR THE NORTHWESTERN RAILWAY TERMINAL BUILDING, CHICAGO. By M. Deutsch. Sch. Mines Quart., vol. 31, p. 219. 5 pages. I.

ALTERING STAMP MILL FOUNDATIONS. E. & M. J., vol. 89, p. 763. 1 column. I.

BATTERY FOUNDATION AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 571. I.

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WATERPROOF CELLAR CONSTRUCTION. By C. A. MacClure. P. E. Soc. W. Pa., vol. 23, p. 517. 27 pages. I.

RECENT RETAINING WALL PRACTICE. By C. M. Reppert. P. E. Soc. W. Pa., vol. 26, p. 316. 51 pages. I.

ERECTION OF A STEEL CHIMNEY. By J. Hebbard. T. Au. I. M. E., vol. 11, p. 71. 6 pages. I.

See also USE OF CONCRETE IN MINES and COST OF MINE AND MILL CONSTRUCTIONS.

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FLUME CONSTRUCTION ON THE YUKON. J. C. M. I., vol. 11, p. 556. 2½ pages. I.

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Tanks for Mining Purposes

THE CAPACITY OF CIRCULAR VATS FOR FOOT OF DEPTH. By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 10, p. 407. Table.

THE KLONNE TYPE OF HIGH-LEVEL STORAGE TANK. By A. Gradenwitz. E. & M. J., vol. 88, p. 820. 5 columns. I.

See also USE OF CONCRETE IN MINES and COST OF MINE AND MILL CONSTRUCTIONS.

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AN EMPIRICAL METHOD OF DETERMINING THE MAXIMUM OUTPUT OF A VERTICAL SHAFT, USING A CYLINDRICAL-DRUM WINDER, UNDER GIVEN CONDITIONS. By A. W. Brown. T. I. M. E., vol. 38, p. 622. 23½ pages. I.

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DESCRIPTION OF MACHINERY AND PLANT AT WELLESLEY NEW PITS, WEMYSS COLLIERIES. T. I. M. E., vol. 36, p. 594. 6 pages. I.

EQUIPMENT AND METHODS AT THE HECLA MINE, IDAHO. By R. H.

Allen. E. & M. J., vol. 89, p. 311. 8½ columns. I.

SURFACE PLANT AT MODERN COAL MINE. By W. R. Roberts. M. & M., vol. 30, p. 577. 10½ columns. I.

PLANT OF THE UTAH FUEL COMPANY. By A. C. Watts. M. & M., vol. 30, p. 161. 5 columns. I.

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A MODERN MINE AT AUBONÉ IN FRENCH LORRAINE. By E. Walch. E. & M. J., vol. 89, p. 509. 4 columns. I.

OPERATION OF THE SAYRE COLLIERY, PENNSYLVANIA. By H. J. Heffner. Coal Mining Supplement, E. & M. J., vol. 88, p. 28. 8 columns. I.

COAL MINING AT HOSMER, BRITISH COLUMBIA. E. & M. J., vol. 87, p. 896. 2 columns.

THE YATESBORO POWER PLANT OF THE COWANSHANNOCK COAL AND COKE COMPANY. By C. M. Means. M. & M., vol. 29, p. 11. 5½ columns. I.

TABER PLANT OF THE CANADA WEST COAL COMPANY, AT TABER, ALBERTA. By W. Roberts. M. & M., vol. 29, p. 74. 3½ columns. I.

HOISTING AND COAL-HANDLING PLANT. By W. G. Flint. M. & M., vol. 30, p. 12. 2 columns. I.

See also METHODS OF HOISTING, APPLIANCES, ETC., and METHODS OF HANDLING MINERAL AND COAL.

MINE GASES**Mine Atmosphere and Gases**

CHART OF MINE GASES. By C. Myers. E. & M. J., vol. 85, p. 1100. Table.

GASES: Tables and Constants. By G. C. Stone. Sch. Mines Quart., vol. 29, p. 295. 6 pages.

MINE GASES AND SAFETY LAMPS. By W. Hortman. E. & M. J., vol. 89, p. 1076. 2 columns.

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THE REGULATION OF GAS IN MINE AIR CURRENTS. By J. G. Smyth. E. & M. J., vol. 88, p. 14. 9 columns. I.

DETERMINATION AND REGULATION OF THE PERCENTAGE OF GAS IN MINE AIR-COURSES. By J. G. Smyth. M. & M., vol. 29, p. 555. 6 columns. I.

- WITWATERSRAND MINE AIR:** Recent Investigations. By J. Moir. P. C. M. & M. Soc. S. A., vol. 7, p. 65, 12½ columns; p. 145, 1 column; p. 175, 11 columns; p. 203, 8½ columns; p. 248, 32½ columns.
- ON THE GASES AND VENTILATION OF MINES, MORE PARTICULARLY CAVE MINES.** Min. Mag., vol. 9, p. 316, 6 pages; p. 424, 5 pages.
- MINE GASES IN WESTERN AUSTRALIA.** P. C. M. & M. Soc. S. A., vol. 6, p. 227. 1½ columns.
- THE VITIATION OF THE AIR IN TRANSVAAL MINES.** By J. Moir. P. C. M. & M. Soc. S. A., vol. 6, p. 11, 11 columns; p. 53, ½ column; p. 114, 1 column; p. 158, 7 columns; p. 191, 3 columns.
- DEFICIENCY OF OXYGEN IN MINE AIR.** M. & M., vol. 30, p. 174. 1 column.
- AFTERDAMP IN MINES.** M. & M., vol. 30, p. 173. 2½ columns.
- THE ISOLATION OF CERTAIN MINE AREAS FROM CONTACT WITH THE AFTER-GASES CREATED BY AN EXPLOSION.** By N. Robinson. E. & M. J., vol. 87, p. 507. 1½ columns.
- See also **MINE EXPLOSIONS.**
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- A CAUSE OF MISLEADING AIR-ANALYSIS.** Min. & Sci. Press, vol. 97, p. 58. 1 column.
- NOTE ON THE CAUSE OF CERTAIN MISLEADING ANALYSES OF AIR.** P. C. M. & M. Soc. S. A., vol. 8, p. 280. 1 column.
- See also **CHEMISTRY: Methods and Practice.**
- PRODUCTION OF CARBON MONOXIDE IN MINE FIRES.** By E. Schulz. Glückauf, Dec. 4, 1909.
- See also **MINE FIRES.**
- PERMISSIBLE QUANTITY OF CARBON MONOXIDE AND CARBON DIOXIDE IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 168, 2½ columns; p. 251, 12 columns.
- THE ALLOWABLE AMOUNTS OF CARBON MONOXIDE AND CARBON DIOXIDE IN MINES.** E. & M. J., vol. 90, p. 899. ½ column.
- CARBON DIOXIDE.** By M. L. Fuller. U. S. G. S., Mineral Resources, 1905.
- EXPLOSIVE MINE GASES AND DUSTS.** By R. T. Chamberlin. U. S. G. S., Bull. 383. 67 pages. 1909.
- EXPLOSIVE MINE GASES AND DUSTS.** By R. T. Chamberlin. M. & M., vol. 30, p. 171. 7½ columns.
- See also **COAL DUST AS AN EXPLOSIVE.**
- EARTHQUAKES AND FIREDAMP.** M. & M., vol. 30, p. 252. 2½ columns.
- See also **HEALTH OF MINERS.**
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- GASEOUS DECOMPOSITION; PRODUCTS OF BLACK POWDER, WITH SPECIAL REFERENCE TO THE USE OF BLACK POWDER IN COAL MINES.** By C. M. Young. T. A. I. M. E., vol. 41, p. 454. 25½ pages.
- GAS FROM HIGH EXPLOSIVES.** By W. Cullen. M. & M., vol. 29, p. 414. 3 columns.
- GASES RESULTING FROM HIGH EXPLOSIVES.** By W. Cullen. Min. & Sci. Press, vol. 99, p. 297. 3½ columns.
- THE GASES RESULTING FROM THE USE OF HIGH EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 9, p. 144, 17½ columns; p. 235, 4½ columns; p. 274, 1½ columns; p. 306, ½ column.
- THE GASES RESULTING FROM THE USE OF HIGH EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 10. 7½ columns.
- ANALYSES OF GASES FROM BURNING NITROGLYCERIN EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 90. 6½ columns.

See also **CHEMISTRY: METHODS AND PRACTICE AND USE OF EXPLOSIVES IN COAL MINING.**

Occurrence of Gases in Coal

OCCCLUDED GASES IN COAL. By S. W. Part and Percy Barker. Univ. of Ill., Bull. 32, Mar. 1, 1909.

OCCCLUDED GASES IN ILLINOIS COALS. T. A. I. M. E., vol. 40, p. 27. 6 pages.

CONDITION OF GAS IN COAL. By R. T. Chamberlin. M. & M., vol. 30, p. 20, 8 columns, I.; p. 301, 8 columns. D.

STUDY OF THE CONDITIONS OF GAS IN COAL. By R. T. Chamberlin. Mining World, Feb. 5, 1910.

OXYGEN IN COAL. Min. & Sci. Press, vol. 99, p. 399. $\frac{1}{2}$ column.

See also **OUTBURSTS OF GAS IN MINES.**

Gas in Mines Other Than Coal

POISONOUS GASES IN METAL MINES. E. & M. J., vol. 87, p. 300. 1 column.

CARBONIC ACID GAS IN THE EL DOCTOR MINES, MEXICO. Min. & Sci. Press, vol. 95, p. 243. $\frac{1}{2}$ column.

See also **MINE ATMOSPHERE AND GASES** and first volume of **INDEX.**

Outburst of Gas in Mines

ESCAPE OF GAS FROM COAL. By H. C. Porter and F. K. Ovitz. U. S. Bureau of Mines, Circular No. 2.

GAS BLOWERS IN COYOTE MINE: Coal. By A. A. Galloway. M. & M., vol. 31, p. 364. 1 column. I.

See also **OCCURRENCE OF GASES IN COAL.**

Detection and Testing of Mine Gases

THE LIVERING ELECTRICAL INDICATOR FOR FIREDAMP. E. & M. J., vol. 86, p. 627. $\frac{1}{2}$ column.

FIREDAMP: Its Composition, Detection and Estimation. By T. Gray. T. I. M. E., vol. 39, p. 286. 19 pages.

EXAMINING FOR FIREDAMP. By J. Ashworth. M. & M., vol. 30, p. 153. $5\frac{1}{2}$ columns.

APPARATUS FOR THE DETECTION OF FIREDAMP. E. & M. J., vol. 88, p. 566. $\frac{1}{2}$ column.

NOTES ON A SMALL CONTRIVANCE TO MORE EASILY DETECT FIREDAMP. By W. C. Blackett. T. I. M. E., vol. 37, p. 276, $4\frac{1}{2}$ pages, I.; p. 441, $2\frac{1}{2}$ pages.

CARBON MONOXIDE DETECTOR. T. I. M. E., vol. 37, p. 587. 1 page. I.

TESTING FOR CARBON MONOXIDE IN CONNECTION WITH FIRES AND EXPLOSIONS IN MINES. By J. S. Haldane. T. I. M. E., vol. 38, p. 267. $14\frac{1}{2}$ pages.

TESTS FOR CARBON MONOXIDE. M. & M., vol. 31, p. 33. $\frac{1}{2}$ column.

THE CUNYNGHAME-CADMAN GAS-DETECTING DEVICE. By E. A. Hailwood. T. I. M. E., vol. 39, p. 13. $4\frac{1}{2}$ pages. I.

See also **ESTIMATION OF QUANTITY OF GASES.**

See also **SAFETY LAMPS and TESTING BY SAFETY LAMPS.**

Mine Gases and Barometric Pressure

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BAROMETRIC PRESSURE AND LIBERATION OF FIREDAMP. By L. Moir. E. & M. J., vol. 90, p. 565. 11 columns. D.

INFLUENCE OF BAROMETRIC CHANGES ON VENTILATION. E. & M. J., vol. 85, p. 1012. $1\frac{1}{2}$ columns.

EFFECT OF ATMOSPHERIC PRESSURE ON EXUDATION. By W. H. Booth. *Colliery Engineer*, vol. 14, p. 104.

BAROMETER AND FIREDAMP EXPLOSIONS. *Colliery Engineer*, vol. 10, p. 209.

BAROMETRIC PRESSURE AND MINE EXPLOSIONS. *E. & M. J.*, vol. 85, p. 36. 1 column.

CONSIDERATION OF SUPPOSED ATMOSPHERIC INFLUENCE IN CONNECTION WITH COLLIERY EXPLOSIONS. By J. Warburton. *Colliery Engineer*, vol. 8, p. 257.

See also **MINE EXPLOSIONS AND DUST AS AN EXPLOSIVE AGENT.**

Estimation of Quantity of Gases

THE ESTIMATION OF CARBON MONOXIDE IN MINE GAS. By E. H. Weiskopf. *P. C. M. & M. Soc. S. A.*, vol. 9, p. 258, 15½ columns, 1.; p. 307, 1½ columns.

IODOMETRIC DETERMINATION OF SMALL QUANTITIES OF CARBON MONOXIDE. *P. C. M. & M. Soc. S. A.*, vol. 6, p. 137. ¼ column.

See also **DETECTION AND TESTING FOR MINE GASES.**

MINING LAW

Mining Law: Its Principles and Applications

MINING LAW. By E. R. L. Gould. *U. S. G. S., Mineral Resources*, 1886, vol. 8.

UNIFORM MINING LAWS. *Min. & Sci. Press*, vol. 101, p. 438. 10½ columns.

MINING LEGISLATION. *J. C. M. I.*, vol. 13, p. 8. 4½ pages.

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HISTORICAL SKETCH OF MINING LAW. By R. W. Raymond. *U. S. G. S., Mineral Resources* 1883 and 1884, vol. 14. 19 pages.

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THE HUBBELL ELECTRIC MINE LAMP. M. & M., vol. 31, p. 127. 1½ columns. I.

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ACETYLENE LIGHTING. By N. Good-year. Min. & Sci. Press, vol. 95, p. 460. 1½ columns.

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p. 54. 24 pages. 1907.

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p. 225. 12 pages. I.

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2 columns.

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PROSPECTING FOR TIN IN SIAM. By G. B. Adeney. Min. Mag., London, vol. 3, p. 287. 2 columns. I.

PROSPECTING AND TESTING OF CLAY DEPOSITS. By E. K. Soper. Min. & Sci. Press, vol. 100, p. 827. $7\frac{1}{2}$ columns.

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PROSPECTING IN CHINA. By G. F. Ober. Min. Mag. London, vol. 4, p. 223. 1½ columns.

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THE DIVINING ROD. Min. & Sci. Press, vol. 101, p. 711. ¼ column.

DIVINING RODS. By E. S. Giles. Min. & Sci. Press, vol. 97, p. 151. ½ column.

THE DIVINING ROD: A Scientific Test. E. & M. J., vol. 85, p. 1158. 1½ columns.

THE DIVINING ROD. By R. W. Raymond. U. S. G. S., Mineral Resources, 1882, vol. 17. 17 pages.

THE DIVINING ROD. E. & M. J., vol. 85, p. 125. 1 column.

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CALCULATING VALUE IN PLACER GROUND. By O. H. Packer. Min. & Sci. Press, vol. 101, p. 810. 3½ columns. D.

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PERSISTENCE IN DEPTH OF TREADWELL ORES. U. S. G. S., Bull. 259, p. 79. $\frac{1}{2}$ page.

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LIVES OF MINES. Min. & Sci. Press, vol. 97, p. 456. $2\frac{1}{2}$ columns.

LIFE OF RAND MINES. E. & M. J., vol. 90, p. 543. 1 column.

DECREASE OF VALUE IN ORE-SHOOTS WITH DEPTH. By F. L. Garrison. Min. & Sci. Press, vol. 101, p. 511. $2\frac{1}{2}$ columns.

DECREASE IN VALUE OF ORE WITH DEPTH, AT KALGOORLIE, WEST AUSTRALIA. E. & M. J., vol. 85, p. 196. Table.

PROBABLE DEPTH TO WHICH MINING CAN BE CARRIED. P. C. M. & M. Soc. S. A., vol. 8, p. 47. 2 columns.

DEPTH OF ORE AT GOLDFIELD. Min. & Sci. Press, vol. 96, p. 62. $\frac{1}{2}$ column.

PERSISTENCY OF THE ORE IN THE NORTH CAROLINIAN GOLD BELT. E. & M. J., vol. 87, p. 296. 2 columns.

PERMANENCY OF THE RAND MINES. E. & M. J., vol. 89, p. 270. $\frac{1}{2}$ column.

See also THEORY OF ORE DEPOSITS, ETC., and DEEP MINING, also DEVELOPMENT.

Development: Size, Shape, Depth and Arrangement of Shafts and Slopes

THE NECESSITY OF DISTINGUISHING BETWEEN PROSPECTING, DEVELOPING AND MINING. By R. W. Brock. J. C. M. I., vol. 13, p. 490. 5 pages.

PRELIMINARY DEVELOPMENT WORK. By A. M. Bateman. J. C. M. I., vol. 13, p. 621. $10\frac{1}{2}$ pages. I.

THE MISPLACEMENT OF MINING SHAFTS AND ADITS IN VICTORIA. By S. Hunter. T. Au. I. M. E., vol. 10, p. 326. 14 pages. I.

DEVELOPMENT WORK IN MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 332. $\frac{1}{2}$ column.

DEVELOPMENT OF MINES FOR DIFFERENT PITCH. M. & M., vol. 30, p. 588. $3\frac{1}{2}$ columns. I.

- DEVELOPMENT OF A SLOPE MINE. M. & M., vol. 30, p. 340. Map.
- SIZE AND DEPTH OF SOME SHAFTS IN AMERICA. M. & M., vol. 29, p. 392. $\frac{1}{2}$ column.
- CIRCULAR VS. RECTANGULAR SHAFT SINKING. By H. M. Payne. E. & M. J., vol. 89, p. 231. 5 columns. I.
- ELLIPTICAL VS. RECTANGULAR SHAFTS. By W. A. Weldin. M. & M., vol. 31, p. 167. 5 columns. I.
- See also SHAFT SINKING.
- THE INTERVAL BETWEEN LEVELS. E. & M. J., vol. 85, p. 454. $\frac{3}{4}$ column.
- THE SYSTEMATIC DEVELOPMENT OF A COAL MINE. By W. Leckie. E. & M. J., vol. 85, p. 863. 11 columns. I.
- SYSTEMATIC DEVELOPMENT IN PITTSBURGH SEAM. By F. Z. Schellenberg. E. & M. J., vol. 90, p. 521. 11 columns. I.
- ECONOMICAL DEVELOPMENT OF COAL MINES. By H. J. Nelms. E. & M. J., vol. 87, p. 800. $1\frac{1}{2}$ columns.
- PLAN OF DEVELOPMENT AT BOISSEVAIN, WEST VIRGINIA. E. & M. J., vol. 85, p. 866. 1 column. I.
- METHOD OF DEVELOPING THE MINE "C," WYOMING. E. & M. J., vol. 90, p. 226. Plan.
- METHODS OF DEVELOPMENT IN THE COAL FIELDS OF SOUTHERN COLORADO. M. & M., vol. 30, p. 588. $3\frac{1}{2}$ columns. I.
- DEVELOPMENT OF THE HOSMER COAL MINES. J. C. M. I., vol. 13, p. 242. 1 page. I.
- See also METHODS OF MINING COAL.
- METHOD OF DEVELOPMENT IN THE ITALY LIGNITE MINES. E. & M. J., vol. 89, p. 1176. $1\frac{1}{2}$ columns.
- DEVELOPMENT IN THE PITCHING COAL SEAMS OF HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 25. $\frac{3}{4}$ column. I.
- MINE DEVELOPMENT AT CANANEA, MEXICO. M. & M., vol. 30, p. 28. 2 columns.
- DEVELOPMENT OF THE MIAMI COPPER MINES. M. & M., vol. 30, p. 82. $\frac{1}{2}$ column. I.
- MINE DEVELOPMENT AT RAY, NEVADA. M. & M., vol. 29, p. 545. 1 column.
- DEVELOPMENT OF THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 123. 4 pages. I.
- MINING; DEVELOPMENT OF THE IRON ORE MINES OF THE BIRMINGHAM DISTRICT, ALABAMA. T. A. I. M. E., vol. 40, p. 113. 2 pages. I.
- DEVELOPING A NEW ORE HORIZON IN THE JOPLIN DISTRICT. By L. L. Wittich. M. & M., vol. 30, p. 637. $5\frac{1}{2}$ columns. I.
- DEVELOPMENT: Sampling and Ore Valuation of Gold Mines. By C. B. Horwood and Mungo Park. T. A. I. M. E., vol. 39, p. 685. 9 pages. I.
- See also MINE SAMPLING and VALUE OF MINES.
- DEVELOPMENT AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 435. 6 columns. I.
- THE GIROUX SHAFT AT KIMBERLY, NEVADA. By C. E. Arnold. T. A. I. M. E., vol. 41, p. 536. $5\frac{1}{2}$ pages. I.
- DEVELOPMENT AT THE CRESSON MINE, CRIPPLE CREEK, COLORADO. M. & M., vol. 31, p. 737. 2 columns.
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- METHOD OF DEVELOPMENT IN THE TREADWELL MINES. Min. & Sci. Press, vol. 97, p. 85. 4 columns. I.
- METHODS OF DEVELOPMENT ON THE RAND. T. A. I. M. E., vol. 5, p. 46. $3\frac{1}{2}$ pages.
- THE DEEP SHAFTS OF THE RAND. T. A. I. M. E., vol. 5, p. 44. $2\frac{1}{2}$ pages.
- See also DEEP MINING.
- DEVELOPMENT IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 86, 1 column, I.; p. 89, 9 columns, I.

- METHOD OF DEVELOPING THE PILGRIM'S REST PROPERTY.** P. C. M. & M. Soc. S. A., vol. 9, p. 296. $\frac{1}{2}$ column. I.
- DEVELOPMENT OF THE ST. JOHN DEL REY MINES IN BRAZIL.** Min. Mag., London, vol. 3, p. 465. 1 column. I.
- DEVELOPMENT OF THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA.** E. & M. J., vol. 89, p. 420. 1 column. I.
- THE DEVELOPMENT OF AN ORE SHOOT IN NOVA SCOTIA.** By E. P. Brown. J. M. Soc. N. S., vol. 12, p. 57. $4\frac{1}{2}$ pages. I.
- DEVELOPMENT AT THE GRANBY MINES.** J. C. M. I., vol. 11, p. 394. $6\frac{1}{2}$ pages. I.
- SHAFTS AT THE MOUNT MORGAN MINE.** E. & M. J., vol. 87, p. 751. $1\frac{1}{2}$ columns.
- DEVELOPMENT IN THE MEXICAN MINE, COMSTOCK LODGE.** Min. & Sci. Press, vol. 100, p. 420. 2 columns. I.
- RECENT WORK ON THE COMSTOCK.** By W. D. O'Brien. Min. & Sci. Press, vol. 96, p. 804. $4\frac{1}{2}$ columns. I.
- METHOD OF DEVELOPMENT EMPLOYED AT THE LOS PILARES MINE, MEXICO.** M. & M., vol. 31, p. 107. 1 column. I.
- DEVELOPMENT AT THE ESPERANZA MINE, EL ORO, MEXICO.** By W. E. Hindry. Min. & Sci. Press, vol. 99, p. 822. 7 columns. I.
- METHOD OF DEVELOPMENT AT THE ESPERANZA MINE, MEXICO.** Min. & Sci. Press, vol. 99, p. 846. 1 column.
- A MINING PUZZLE: Exploration at Broken Hill, NEW SOUTH WALES.** By N. Dudley. T. A. I. M. E., vol. 2, p. 111. 3 pages.
- See also **MINE MAPS, and METHODS OF MINING, GENERAL AND MISCELLANEOUS.**
- See also **COST OF DEVELOPMENT.**
- Shaft Sinking: Processes, Applications, Rate of Sinking, Raises, Winzes, Etc.**
- MODERN SHAFT SINKING.** By F. Donaldson. M. & M., vol. 29, p. 392, $3\frac{1}{2}$ columns; p. 459, 10 columns, I.; p. 515, $7\frac{1}{2}$ columns, I.; p. 563, $6\frac{1}{2}$ columns, I.; vol. 30, p. 124, $9\frac{1}{2}$ columns, I.; p. 218, $5\frac{1}{2}$ columns, I.; p. 332, $5\frac{1}{2}$ columns, I.; p. 404, $5\frac{1}{2}$ columns, I.; p. 632, $5\frac{1}{2}$ columns, I.
- SHAFT SINKING.** By C. K. Colvin. Min. & Sci. Press, vol. 85, p. 191. 2 columns.
- IMPROVED SHAFT SINKING METHODS AT DUCKTOWN.** By W. Y. Westervelt. E. & M. J., vol. 89, p. 275. $3\frac{1}{2}$ columns. I.
- NOTES ON VERTICAL SHAFT SINKING ON THE WITWATERSRAND.** By H. F. Roche. P. C. M. & M. Soc. S. A., vol. 5, p. 200, 8 columns, I.; p. 259, $7\frac{1}{2}$ columns; p. 312, $3\frac{1}{2}$ columns; vol. 6, p. 17, 3 columns.
- SINKING THE WOODWARD NO. 3 SHAFT.** By R. V. Norris. E. & M. J., vol. 89, p. 1182. $12\frac{1}{2}$ columns. I.
- THE GIROUX SHAFT AT KIMBERLY, NEVADA.** By C. E. Arnold. E. & M. J., vol. 89, p. 1325. 5 columns. I.
- SHAFT SINKING AT THE GIROUX, ELY, NEVADA.** Min. & Sci. Press, vol. 100, p. 826. $1\frac{1}{2}$ columns.
- THE SINKING AND EQUIPMENT OF THE LITTLETON COLLIERIES.** By T. H. Bailey. T. I. M. E., vol. 39, p. 418. 38 pages. I.
- SINKING INTO THE LOWER COAL-MEASURE AT HULTON COLLIERY.** By A. J. Tonge. T. I. M. E., vol. 39, p. 350. $12\frac{1}{2}$ pages. I.
- THE SINKING OF THE ASTLEY GREEN SHAFTS, AT ASTLEY, NEAR MANCHESTER, BY MEANS OF THE DROP-SHAFT METHOD AND UNDERHANGING TUBBING.** By C. Pilkington and P. L. Wood. T. I. M. E., vol. 39, p. 529. 25 pages. I.

- SHAFT SINKING AT STELLA MINE, NEW YORK.** E. & M. J., vol. 88, p. 617. 2 columns. I.
- SINKING THE JOHN SHAFT AT HAMSTERLEY COLLIERY, THROUGH SAND AND GRAVEL, BY MEANS OF UNDERGROUND TUBBING.** By J. Cummins. T. I. M. E., vol. 38, p. 320. 13 pages. I.
- SINKING THE CLONAN SHAFT AT MINEVILLE, NEW YORK.** By G. C. Stoltz. E. & M. J., vol. 85, p. 111. 4 columns. I.
- SINKING A FIVE-COMPARTMENT SHAFT ON THE RAND.** By E. M. Weston. E. & M. J., vol. 85, p. 391. 15 columns. I.
- SINKING OPERATIONS AT WELLESLEY NEW FITTING, WEMYSS COLLIERIES.** By G. D. Budge and P. Dunsire. T. I. M. E., vol. 36, p. 318. 6½ pages. I.
- SINKING AND TIMBERING OF THE ALLAN SHAFTS, NEAR STELLARTON, NOVA SCOTIA.** By H. E. Coll. J. M. Soc. N. S., vol. 12, p. 12. 12 pages. I.
- SHAFT SINKING AT QUINCY MINE, MICHIGAN.** J. C. M. I., vol. 10, p. 401. 1 page. I.
- SINKING THROUGH BAD GROUND.** By F. W. Adgate. Min. & Sci. Press, vol. 95, p. 183. 4½ columns. I.
- SHAFT SINKING IN SOFT GROUND BY FORE-POLING.** M. & M., vol. 29, p. 515. 2 columns. I.
- SHAFT SINKING THROUGH FAULTED GROUND.** E. & M. J., vol. 87, p. 215. 1½ columns.
- SHAFT SINKING IN DANGEROUS GROUND.** Min. Mag., London, vol. 2, p. 293. 2 columns. I.
- SINKING A WET SHAFT AT TOMBSTONE.** By E. W. Walker. Min. & Sci. Press, vol. 98, p. 284. 3 columns. I.
- SINKING THROUGH SAND AT NEW-BIGGIN COLLIERY.** By E. M. Bainbridge and W. M. Redfeam. T. I. M. E., vol. 38, p. 577. 16 pages. I.
- SHAFT SINKING IN QUICKSAND AND BOULDERS.** By G. W. Stuart. J. M. Soc. N. S., vol. 11, p. 69. 5½ pages.
- SHAFT SINKING BY CEMENTATION.** By L. Morin. E. & M. J., vol. 86, p. 221. 6 columns. I.
- See also **SHAFT LINING.**
- PUDDLING A WET SHAFT.** By H. Bourisin. Min. & Sci. Press, vol. 96, p. 127. 2½ columns. I.
- SINKING A SHAFT WITH DROP-SHAFT AND AIR-LOCK.** Sch. Mines Quart., vol. 31, p. 219. 5 pages. I.
- THE DROP-SHAFT METHOD OF SINKING.** E. & M. J., vol. 90, p. 918. 4½ columns. I.
- SHAFT SINKING BY CAISSONS OR DROP-SHAFTS.** M. & M., vol. 29, p. 517. 3½ columns. I.
- SPECIAL METHODS OF SHAFT SINKING.** P. C. M. & M. Soc. S. A., vol. 8, p. 64. 2½ columns.
- DRIVING A LONG VERTICAL RAISE.** By C. T. Kriebel. M. & M., vol. 30, p. 282. 2 columns. I.
- SINKING A WINZE WITH LONG HOLES.** By G. C. McFarlane. E. & M. J., vol. 86, p. 713. 1½ columns. I.
- LONG-HOLE SYSTEM OF SHAFT SINKING.** E. & M. J., vol. 85, p. 659. ½ column.
- See also **USE OF BORE HOLES, DIAMOND AND ROTARY DRILLS, and CHURN DRILLS.**
- THE USE OF THE CHANNELING MACHINE IN MINING OPERATIONS: A Proposed Method.** Min. & Sci. Press, vol. 101, p. 707. 5 columns. I.
- DRIVING VERTICAL RAISES WITH STOPPING DRILLS.** By A. O. Christensen. E. & M. J., vol. 88, p. 937. 2½ columns. I.
- DRIVING INCLINED RAISES WITH STOPPING DRILLS.** By A. O. Christensen. E. & M. J., vol. 88, p. 618. 2 columns. I.

DRIVING A SLOPE IN NEWFOUNDLAND. M. & M., vol. 31, p. 569. 7 columns. I.

BORING LARGE SHAFTS. Min. & Sci. Press, vol. 20, p. 257, 2 columns, I.; p. 272, 1½ columns, I.

THE KIND-CHAUDRON BORING PROCESS FOR SHAFT SINKING. M. & M., vol. 30, p. 332. 5½ columns. I.

SINKING BY MEANS OF UNDERHANGING TUBBING. E. & M. J., vol. 89, p. 878. 4½ columns. I.

See also **SHAFT LINING.**

SHAFT SINKING BY FREEZING PROCESS. By S. F. Walker. M. & M., vol. 30, p. 41. 7½ columns.

EXTENSION OF A COLLIERY WORKING SHAFT. By M. S. Hachita. E. & M. J., vol. 90, p. 1168. 6½ columns. I.

DRILLING IN SHAFT SINKING ON THE RAND. E. & M. J., vol. 85, p. 393. 1 column.

See also **DRILLING AND BORING.**

THE SINKING OF CIRCULAR SHAFTS. By Robert Steven. T. I. M. E., vol. 38, p. 22. 6 pages. I.

See also **DEVELOPMENT: Size, Shape, etc., of Shafts.**

NOTE ON A PROBLEM DURING SHAFT SINKING. By C. B. Saner. P. C. M. & M. Soc. S. A., vol. 9, p. 70, 8 columns, I.; p. 303, 4½ columns, I.

RATE OF SHAFT SINKING ON THE RAND. T. Au. I. M. E., vol. 5, p. 49. 6 pages.

RAPID SHAFT SINKING IN BUTTE. By C. J. Stone. E. & M. J., vol. 90, p. 107. 2 columns.

RECORD OF SHAFT SINKING AT NO. 1 SKY LINE MINE. Min. & Sci. Press, vol. 88, p. 40. Table.

NEW SHAFT SINKING RECORD AT CORBIN, MONTANA. By F. J. Tuck. Min. & Sci. Press, vol. 101, p. 406. 1½ columns.

RECORD SHAFT SINKING, SOUTH AFRICA. Min. & Sci. Press, vol. 95, p. 438. ½ column.

SKIPS OR BUCKETS IN SINKING VERTICAL SHAFTS. By C. B. Saner. E. & M. J., vol. 87, p. 644. 7 columns.

See also **HOISTING BUCKETS, and SKIPS FOR RAISING MINERAL.**

VERTICAL CURVES IN SHAFTS. By S. Smillie. E. & M. J., vol. 90, p. 1000. 5 columns. I.

SPECIFICATIONS FOR SINKING AND LINING SHAFTS. M. & M., vol. 29, p. 463. 1½ columns.

ARRANGEMENT OF HOLES IN SHAFT SINKING IN BENDIGO. T. Au. I. M. E., vol. 8, pt. 2, p. 197. 5 pages. I.

ARRANGEMENT OF HOLES IN SHAFT SINKING ON THE RAND. E. & M. J., vol. 85, p. 395. Tables. I.

ARRANGEMENT OF HOLES IN SHAFT SINKING, ALLAN SHAFTS, NOVA SCOTIA. J. M. Soc. N. S., vol. 12, p. 22. I.

See also **ARRANGEMENT OF HOLES IN BLASTING.**

See also **USE OF CONCRETE IN MINES.**

See also **DRAINAGE IN GENERAL and PUMPS FOR MINE USE.**

See also **ROPES, CHAINS, COUPLINGS, ETC., and DEVELOPMENT.**

Methods of Mining Coal, Lignite, Etc.

THE MINING OF COAL: Pits and Galleries in General. Min. Mag., vol. 8, p. 163, 2 pages; vol. 7, p. 73, 4 pages; p. 258, 7½ pages; p. 463, 7½ pages.

THE VARIOUS MODES IN WHICH COAL IS WORKED IN ENGLAND, AND AN EXAMINATION OF THE PRACTICE IN DIFFERENT DISTRICTS. By J. K. Blackwell. Min. Mag., vol. 1, p. 559, 12 pages; p. 3, 10 pages.

GENERAL REMARKS AND RULES ON THE WORKING AND WINNING OF COAL. Min. Mag., vol. 4, p. 135, 7 pages; p. 337, 6 pages.

- SOME REMARKS ON COAL MINING. By J. Marlor. *Min. Mag.*, vol. 5, p. 415, 4 pages; p. 458, 10½ pages; vol. 6, p. 27, 13½ pages; p. 107, 10 pages; p. 213, 12½ pages; p. 323, 10 pages.
- COAL MINING IN ALABAMA. By H. M. Payne. *E. & M. J.*, vol. 89, p. 1163. 1½ columns.
- COAL AND COAL MINING IN NEW SOUTH WALES. By T. Parton. *T. Au. I. M. E.*, vol. 10, p. 233. 27½ pages.
- MINING METHODS AT SEATON-DELAVAL COLLIERY, ENGLAND. By L. W. Mayer. *E. & M. J.*, vol. 86, p. 765. 13 columns. I.
- COAL MINING IN NORTHUMBERLAND, ENGLAND. By G. R. Dixon. *E. & M. J.*, vol. 85, p. 212. 8 columns. I.
- METHODS OF WORKING IN THE NORTHUMBERLAND COAL MINES. *E. & M. J.*, vol. 85, p. 212. 3 columns.
- COAL MINING BY THE BORD-AND-PILLAR SYSTEM, NORTHUMBERLAND, ENGLAND. By G. R. Dixon. *E. & M. J.*, vol. 85, p. 411. 12½ columns. I.
- See also ROOM AND PILLAR MINING.
- SPECIAL METHOD FOR MINING COAL IN ENGLAND. By G. R. Dixon. *E. & M. J.*, vol. 85, p. 1203. 7 columns. I.
- SOUTH STAFFORDSHIRE METHOD OF MINING COAL. By L. W. Mayer. *E. & M. J.*, vol. 86, p. 673. 10 columns. I.
- OPERATION OF CARMAUX COAL MINES IN FRANCE. By L. W. Mayer. *E. & M. J.*, vol. 86, p. 574. 16 columns. I.
- ADVANCED METHODS OF MINING COAL IN SILESIA. By L. W. Mayer. *E. & M. J.*, vol. 86, p. 887. 17 columns. I.
- THE TWO-ENTRY METHOD OF MINING IN SOUTHERN INDIANA. *E. & M. J.*, vol. 90, p. 870. 4 columns. I.
- See also DEVELOPMENT, ETC.
- COAL MINING METHODS IN RANDOLPH COUNTY, MISSOURI. By J. J. Rutledge. *E. & M. J.*, vol. 86, p. 6. 6½ columns. I.
- METHODS OF MINING COAL IN NEW ZEALAND. By S. Fry. *E. & M. J.*, vol. 87, p. 753. 9½ columns. I.
- MINING METHODS IN THE PITTSBURG SEAM. *E. & M. J.*, vol. 90, p. 521. 10 columns. I.
- SUGGESTED MINING METHOD FOR PITTSBURG SEAM. By R. Y. Williams. *E. & M. J.*, vol. 86, p. 330. 7½ columns. I.
- POCAHONTAS REGION MINING METHODS. By H. H. Stoeck. *M. & M.*, vol. 29, p. 394. 13 columns. I.
- METHODS OF MINING IN THE POCAHONTAS REGION. *M. & M.*, vol. 29, p. 398. 4 columns. I.
- COAL MINING METHODS IN SIBERIA. *E. & M. J.*, vol. 89, p. 625. 3½ columns.
- COAL MINING AT DANTE, VIRGINIA. By R. W. Stone. *U. S. G. S.*, Bull. 316, p. 68. 8 pages. I. 1906.
- METHOD OF MINING COAL IN WASHINGTON. *M. & M.*, vol. 30, p. 17. ½ column. I.
- METHODS OF MINING COAL IN WEST VIRGINIA. *M. & M.*, vol. 29, p. 509. 11½ columns. I.
- COAL MINING AT MORGANTOWN, WEST VIRGINIA. By R. B. Brimsmade. *E. & M. J.*, vol. 89, p. 1236. 5 columns.
- COAL MINING METHODS AT GARY, WEST VIRGINIA. By J. S. Walker. *E. & M. J.*, vol. 88, p. 6. 10½ columns. I.
- SYSTEMS OF MINING IN THE DIAMONDVILLE COAL FIELD, WYOMING. *E. & M. J.*, vol. 85, p. 116. 1½ columns.
- METHOD OF WORKING THE GEORGE'S CREEK "BIG VEIN": Old and New. *E. & M. J.*, vol. 87, p. 307. 6 columns. I.
- PLANS FOR MINING A FLAT COAL SEAM. By A. H. Stow. *E. & M. J.*, vol. 85, p. 504. 9½ columns. I.

MINING IN FLAT COAL SEAMS UNDER HEAVY COVER. By A. H. Stow. E. & M. J., vol. 86, p. 135. 11½ columns. I.

METHOD OF MINING TWO SEAMS OF COAL WITH AN INTERVENING PARTING OF SHALE 6 TO 10 FEET THICK. M. & M., vol. 29, p. 46. 1 column. I.

GETTING TOP (ROOSTER) COAL. E. & M. J., vol. 86, p. 15. ¾ column.

THE BLOCK SYSTEM OF COAL MINING IN ENGLAND. E. & M. J., vol. 85, p. 1203. 2½ columns. I.

WORKING A COAL SEAM OF MODERATE THICKNESS. By G. R. Dixon. E. & M. J., vol. 85, p. 1247. 6½ columns. I.

WORKING TWO COAL SEAMS IN CLOSE PROXIMITY. By W. F. White. E. & M. J., vol. 87, p. 756. 2½ columns. I.

A METHOD OF WORKING A THICK COAL SEAM. By G. Poole. E. & M. J., vol. 86, p. 15. 5½ columns. I.

NOTES ON WORKING THE THICK COAL OF SOUTH STAFFORDSHIRE AND WARWICKSHIRE. By L. Holland. T. I. M. E., vol. 37, p. 46. 6½ pages. I.

HORIZONTAL-SLICE METHOD OF MINING THICK COAL SEAMS, ST. ÉTIENNE. T. I. M. E., vol. 36, p. 408. 12 pages. I.

MINING A 20-FOOT SEAM AT CARMAUX, FRANCE. E. & M. J., vol. 86, p. 578. 2 columns.

See also **MINING THICK AND MASSIVE DEPOSITS.**

METHOD OF WORKING A STEEP COAL SEAM. By A. Y. Hay. E. & M. J., vol. 89, p. 1331. 8 columns. I.

WORKING A STEEP COAL SEAM. By A. Y. Hay. M. & M., vol. 31, p. 77. 4½ columns. I.

COAL MINING IN A VERTICAL SEAM. By H. M. Payne. E. & M. J., vol. 90, p. 469. 1½ columns. I.

THE WORKING OF THE INCLINED SEAMS IN THE ST. ÉTIENNE COAL FIELD, AT THE MONTRAM-BERT AND

LA BÉRANDIÈRE COPIERIES. By H. C. Annett. T. I. M. E., vol. 36, p. 394. 30½ pages. I.

THE CHUTE-BREAST SYSTEM OF MINING IN WASHINGTON. M. & M., vol. 30, p. 313. ½ column. I.

PITCH MINING IN THE HAZLETON DISTRICT. By D. S. Wolfe. Coal Mining Supplement, E. & M. J., vol. 88, p. 25. 5½ columns. I.

METHODS OF MINING LIGNITE IN ITALY. By C. R. King. E. & M. J., vol. 89, p. 1176. 17½ columns. I.

METHOD OF MINING GILSONITE: Use of a Steam Jet. E. & M. J., vol. 89, p. 1115. ¾ column. I.

See also **MINE MAPS.**

See also **ROOM-AND-PILLAR MINING, and LONGWALL MINING.**

Room-and-Pillar Mining

A ROOM-AND-PILLAR METHOD. By A. E. Robinson. M. & M., vol. 31, p. 88. ½ column. I.

ROOM-AND-PILLAR MINING IN THE GREAT FALLS COAL FIELD, MONTANA. E. & M. J., vol. 87, p. 588. ¾ column. I.

COAL MINING ON THE RETREATING SYSTEM. By H. J. Nelms. E. & M. J., vol. 86, p. 1251. 2½ columns. I.

COAL MINING BY THE RETREATING ROOM-AND-PILLAR SYSTEM. By H. J. Nelms. E. & M. J., vol. 86, p. 17. 4 columns. I.

ROOM-AND-PILLAR METHOD OF WORKING COAL, GARY, WEST VIRGINIA. E. & M. J., vol. 88, p. 9. Map.

ADVANCE AND RETREAT ROOM-AND-PILLAR SYSTEM. By H. J. Nelms. E. & M. J., vol. 89, p. 879. 2½ columns. I.

METHODS OF MINING ROOM COAL IN WEST VIRGINIA. M. & M., vol. 29, p. 511. ½ column. I.

METHOD OF WORKING THE HOSMER COAL MINES: Room-and-Pillar. J. C. M. I., vol. 13, p. 243. I.

COAL MINING AT KAYLOR, PENNSYLVANIA. By E. K. Judd. E. & M. J., vol. 88, p. 453. 1½ columns. I.

LIGNITE COAL MINING IN BOHEMIA: Room-and-Pillar Method. By W. S. Hall. M. & M., vol. 29, p. 253. 4½ columns. I.

MINING OF BORAX IN AMERICA: Room-and-Pillar Method. E. & M. J., vol. 88, p. 827. 1 column.

MICA MINING. By A. S. Atkinson. E. & M. J., vol. 87, p. 941. 3½ columns.

See also **METHODS OF MINING COAL**, and first volume of **INDEX**.

Longwall Mining

ON THE WORKING OF THIN SEAMS OF COAL, WITH OBSERVATIONS ON LONGWALL AND BORD-AND-PILLAR WORK. By C. C. Greenwell. Min. Mag., vol. 9, p. 413, 6 pages; p. 494, 12½ pages.

LONGWALL IN INCLINED SEAMS. By J. G. MacKenzie. M. & M., vol. 29, p. 491. 3½ columns. I.

INFLUENCE OF CLEAT IN LONGWALL MINING. E. & M. J., vol. 85, p. 213. 1½ columns.

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PANEL LONGWALL MINING. E. & M. J., vol. 85, p. 894. 1½ columns.

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AMERICAN LONGWALL MINING METHODS. By H. M. Payne. E. & M. J., vol. 90, p. 1020. 8 columns. Maps.

LONGWALL METHODS OF MINING A COAL SEAM. By L. W. Mayer. E. & M. J., vol. 86, p. 19. 13 columns. I.

LONGWALL ADVANCING IN ANTHRACITE MINING IN PENNSYLVANIA. M. & M., vol. 29, p. 40. 1 column. I.

THE LONGWALL MINES OF ILLINOIS. By W. F. Pellier. E. & M. J., vol. 89, p. 380. 5 columns. I.

THE LONGWALL METHOD OF WORKING IN ENGLAND. By Geo. R. Dixon. E. & M. J., vol. 85, p. 1145. 11½ columns. I.

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LONGWALL MINING IN THE KANSAS STATE MINE. E. & M. J., vol. 89, p. 1159. 9 columns. I. Map.

THE LONGWALL METHOD OF MINING EMPLOYED IN THE FROZEN GRAVELS OF THE NORTH. Min. & Sci. Press, vol. 98, p. 382. 8 columns. I.

See also **MINING FROZEN GRAVELS, METHODS OF MINING COAL AND COST OF COAL MINING**.

Panel Mining

MINING COAL WITH THE PANEL SYSTEM. By A. H. Stow. E. & M. J., vol. 85, p. 892. 10½ columns. I.

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Drawing Pillars in Coal Mines

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PILLAR DRAWING IN THE CONNELLSVILLE REGION. T. A. I. M. E., vol. 41, p. 229. 10 pages. I.

ROBBING PILLARS IN THE PITCHING COAL SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol. 88, p. 27. $\frac{1}{2}$ column.

RECOVERING ABANDONED COAL PILLARS. By W. L. Hamilton. E. & M. J., vol. 88, p. 22. 6 columns. I.

WORKING THE WALLS OR DRAWING PILLARS IN COAL MINING BY LONGWALL. M. & M., vol. 29, p. 492. 1 column.

ROBBING PILLARS AT THE SEATON-DELAVAL COLLIERY, ENGLAND. E. & M. J., vol. 86, p. 768. 1 column. I.

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METHOD OF MINING BARITE IN MISSOURI. T. A. I. M. E., vol. 40, p. 728. $6\frac{1}{2}$ pages. I.

CLAY MINING AND ITS RELATION TO COAL MINING. By R. R. Hice. E. & M. J., vol. 88, p. 105. $7\frac{1}{2}$ columns.

METHODS OF MINING AND HANDLING ORE IN BUTTE. By E. Higgins. E. & M. J., vol. 85, p. 97. 8 columns. I.

See also **METHODS OF HANDLING MINERAL AND COAL.**

MINING METHODS EMPLOYED AT CANANEA, MEXICO. By M. J. Elsing. E. & M. J., vol. 90, p. 914, $9\frac{1}{2}$ columns, I.; p. 963, $10\frac{1}{2}$ columns, I.

MINING METHODS IN THE CLIFTON-MORENCI DISTRICT, ARIZONA. Min. & Sci. Press, vol. 101, p. 831. 12 columns. I.

MICHIGAN COPPER MINING METHODS. By L. Fraser. Min. & Sci. Press, vol. 96, p. 847. $6\frac{1}{2}$ columns. I.

WORK AND METHODS AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.

- By L. G. Hancock. T. Au. I. M. E., vol. 11, p. 97. 7 pages.
- UNDERGROUND MINING METHODS AT THE QUINCY COPPER MINE, MICHIGAN. By G. R. McLaren. J. C. M. I., vol. 10, p. 399. 18½ pages. I.
- METHODS OF MINING IRON ORE AT SUNRISE, WYOMING. By B. W. Vallat. E. & M. J., vol. 85, p. 399. 9½ columns. I.
- MINING ON THE GOGEBIC RANGE. By P. S. Williams. M. & M., vol. 31, p. 712. 4½ columns. I.
- METHOD OF MINING AT THE NORTH STAR MINES, GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 397. 2 columns. I.
- COAL MINING METHODS IN GOLD MINES. E. & M. J., vol. 90, p. 1043. 1½ columns.
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- THE MEXICAN METHOD OF MINING. E. & M. J., vol. 86, p. 311. 1½ columns.
- NEW MINING AND MILLING PRACTICE ON THE RAND. By E. M. Weston. E. & M. J., vol. 86, p. 323. 5 columns.
- MINING AT THE REDJANG-LEBONG GOLD-SILVER MINE, SUMATRA. By H. Philp. P. C. M. & M. Soc. S. A., vol. 10, p. 315. 6½ columns.
- THE PILGRIMS REST GOLD FIELDS AND MINING METHODS. By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 16. 3½ columns.
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- METHOD OF MINING AT THE HELEN MINE, MICHIGICOTON, ONTARIO. J. C. M. I., vol. 13, p. 123. 4 pages. I.
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- SOME NOTES ON THE MINING PRACTICE OF THE WITWATERSRAND GOLD FIELDS, SOUTH AFRICAN REPUBLIC. By G. A. Denny. T. Au. I. M. E., vol. 5, p. 8. 62 pages. I.
- MINING METHODS AT KALGOORLIE, WEST AUSTRALIA MINES. E. & M. J., vol. 85, p. 196. 1 column.
- MINING AT THE PROMONTORIO SILVER MINE, DURANGO, MEXICO. T. A. I. M. E., vol. 38, p. 747. 2 pages.
- METHODS OF DEEP LEAD MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 377. 2½ columns.
- METHOD OF MINING THE DEEP LEAD IN AUSTRALIA. By D. H. Browne. Min. & Sci. Press, vol. 97, p. 568. 2 columns.
- See also AUSTRALIA, OCCURRENCE OF GOLD, and AURIFEROUS GRAVELS.
- PRACTICAL HINTS ON DEEP ALLUVIAL MINING. By D. H. Browne. T. Au. I. M. E., vol. 7, p. 61. 10 pages.
- THE STULL-SET METHOD OF MINING AT THE HECLA MINE, IDAHO. E. & M. J., vol. 89, p. 312. 1 column.
- SQUARE-SET MINING, MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 749. 1 column. I.
- SQUARE-SET SYSTEM IN THE NEW SOUTH WALES MINES. T. Au. I. M. E., vol. 9, p. 119. 4½ pages. I.
- See also SQUARE-SET TIMBERING.
- MINING AND STOPING METHODS IN THE CŒUR D'ALENE. By J. Tysowski. E. & M. J., vol. 90, p. 452. 8½ columns. I.
- MINING METHOD IN THE CŒUR D'ALENE REGION. Min. & Sci. Press, vol. 96, p. 622. 4 columns. I.
- GRANBY MINING METHODS. By C. M. Campbell. J. C. M. I., vol. 11, p. 392. 12 pages. I.
- METHODS OF MINING IN THE GRANBY ORE BODIES. By C. M. Campbell. E. & M. J., vol. 87, p. 252. 13½ columns. I.

DEPARTURE IN SHEET-ORE MINING IN THE JOPLIN DISTRICT. By T. Chapman. E. & M. J., vol. 87, p. 942. 1 column. I.

METHOD OF MINING EMPLOYED IN THE LEAD MINES OF MECHERNICH, PRUSSIA. E. & M. J., vol. 86, p. 169. 9½ columns. I.

METHODS OF WORKING THE NITER DEPOSITS OF CHILE. E. & M. J., vol. 80, p. 20. 3 columns. I.

THE WORKING OF OIL-SHALE AT PUMPFERSTON, SCOTLAND. By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.

MINING METHODS IN THE NORTH. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 810, 8 columns, I.; vol. 98, p. 86, 8 columns, I.; p. 382, 8 columns, I.; p. 587, 10 columns, I.

DRY-WALL MINING AT PANAGUN, BRAZIL. Min. Mag., London, vol. 3, p. 379. 1½ columns. I.

A REVOLUTION IN MINING METHODS. By G. E. Walcott. Min. & Sci. Press, vol. 101, p. 707. 6 columns. I.

A METHOD OF MINING IN HEAVY GROUND. By W. L. Fleming. E. & M. J., vol. 88, p. 375. 3½ columns. I.

THE PANEL SYSTEM AS APPLIED TO METAL MINING. By H. E. West. E. & M. J., vol. 87, p. 1177. 8 columns. I.

See also **ROOM AND PILLAR MINING, and METHODS OF COAL MINING.**

RALEIGH COUNTY MINING METHODS, WEST VIRGINIA. By H. H. Stoeck. M. & M., vol. 29, p. 471. 10 columns. I.

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THE MILLING METHOD OF MINING AS EMPLOYED AT THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 123. 4 pages. I.

MINING THE TREADWELL LODGE. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 85. 7½ columns. I.

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THE CAVING SYSTEM AT THE DARIEN MINE, PANAMA. By A. B. Chase. Min. & Sci. Press, vol. 95, p. 238. 1½ columns. I.

THE CAVING METHOD AS EMPLOYED AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1273. 13*columns. I.

CANANEA CAVING AND SLICING SYSTEMS. By R. L. Herrick. M. & M., vol. 30, p. 23. 13½ columns. I.

TOP-SLICING MINING METHODS AT CANANEA, MEXICO. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 230. 2½ columns. I.

THE TOP-SLICE SYSTEM AT CANANEA. M. & M., vol. 30, p. 23. 13 columns. I.

THE SLICING SYSTEM AT CANANEA, MEXICO: A Caving Method. E. & M. J., vol. 90, p. 915. 1½ columns. I.

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- CAVING METHODS IN THE ARIZONA COPPER MINES: Top-Slice and Sub-Drift Methods.** Min. & Sci. Press, vol. 99, p. 392. 1½ columns. I.
- THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA.** By M. J. Elsing. E. & M. J., vol. 90, p. 174. 6 columns. I.
- THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA.** E. & M. J., vol. 90, p. 1291. 2½ columns.
- THE TOP-SLICE SYSTEM AT METCALF, ARIZONA.** E. & M. J., vol. 90, p. 120. ¼ column. I.
- BLOCK-CAVING AT THE CLIFTON-MORENCI MINES.** Min. & Sci. Press, vol. 101, p. 835. 1 column. I.
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- METHOD OF MINING AT MIAMI, ARIZONA: Top-Slice and Sub-Drift Caving Systems.** Min. & Sci. Press, vol. 99, p. 657. 3 columns. I.
- THE CAVING METHOD AS EMPLOYED IN THE GLOBE-KELVIN DISTRICT, ARIZONA.** E. & M. J., vol. 89, p. 813. 2 columns. I.
- CAVING AT BINGHAM CANYON, UTAH.** Min. & Sci. Press, vol. 98, p. 520, 3 columns, I.; p. 555, 3 columns, I.
- THE CAVING SYSTEM OF MINING AT ELY, NEVADA.** M. & M., vol. 29, p. 25, ¾ column; p. 83, ½ column.
- IRON MINING IN MINNESOTA.** By E. K. Soper. Min. & Sci. Press, vol. 101, p. 767. 5½ columns. I.
- MARQUETTE RANGE CAVING METHOD.** By H. H. Stoeck. M. & M., vol. 30, p. 193. 14½ columns. I.
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- STOPPING METHODS IN MINES OF DUCKTOWN BASIN: Underhand Work.** By J. Tyssowski. E. & M. J., vol. 89, p. 463. 5 columns. I.
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- STOPPING AT HOMESTAKE MINE, SOUTH DAKOTA.** By J. Tyssowski. E. & M. J., vol. 90, p. 74. 7½ columns. I.
- METHOD OF STOPPING IN THE TREADWELL MINES.** Min. & Sci. Press, vol. 97, p. 89. 2½ columns. I.
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- BACK STOPING. P. C. M. & M. Soc. S. A., vol. 7, p. 367. $\frac{1}{2}$ column.
- BACK STOPING VS. UNDERHAND STOPING IN LARGE BODIES OF IRON PYRITES. By J. J. Rutledge. E. & M. J., vol. 86, p. 365. 2 $\frac{1}{2}$ columns.
- A MODIFIED SYSTEM OF BACK STOPING. By J. E. Wilson. E. & M. J., vol. 90, p. 950. 1 $\frac{1}{2}$ columns. I.
- BACK STOPING IN THE COPPER MINES OF MICHIGAN. Min. & Sci. Press, vol. 96, p. 847. 1 column.
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- RILL STOPING. E. & M. J., vol. 89, p. 357. $\frac{1}{2}$ column.
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- RILL STOPING AT THE SUPERIOR AND BOSTON MINE, ARIZONA. M. & M., vol. 31, p. 112. 4 columns. I.
- SHRINKAGE STOPING AT THE CRESSON MINE, CRIPPLE CREEK, COLORADO. M. & M., vol. 31, p. 735. 3 $\frac{1}{2}$ columns. I.
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- ADVANTAGES AND DISADVANTAGES OF SHRINKAGE STOPING. T. I. M. & M., vol. 18, p. 297. 4 pages.
- SHRINKAGE STOPING ON THE RAND. Min. Mag. London, vol. 4, p. 145. 2 columns. I.
- SHRINKAGE STOPING AT DUCKTOWN MINES. E. & M. J., vol. 89, p. 464. 1 column. I.
- SHRINKAGE STOPING. E. & M. J., vol. 89, p. 358. $\frac{1}{2}$ column.
- THE SHRINKAGE SYSTEM OF STOPING AS EMPLOYED AT KALGOORLIE. Min. & Sci. Press, vol. 100, p. 391. 1 column.
- SHRINKAGE STOPING AT THE LOS PILARES MINE, MEXICO. Min. & Sci. Press, vol. 100, p. 888. 2 columns. I.
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. By F. P. Rolfe. M. & M., vol. 30, p. 210. 6 $\frac{1}{2}$ columns. I.
- THE SHRINKAGE OR "LAY" SYSTEM OF STOPING. P. C. M. & M. Soc. S. A., vol. 10, p. 301. $\frac{1}{2}$ column.
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. P. C. M. & M. Soc. S. A., vol. 10, p. 30. $\frac{1}{2}$ column.
- THE SHRINKAGE SYSTEM OF STOPING AT CANANEA. E. & M. J., vol. 90, p. 964. 2 columns. I.

RESUING IN MINING. P. C. M. & M. Soc. S. A., vol. 8, p. 48. $\frac{1}{2}$ column.

RESUING IN MINING. P. C. M. & M. Soc. S. A., vol. 7, p. 367. 1 column.

STOPING AT THE CABIN BRANCH MINE, VIRGINIA. By J. Tyssowski. E. & M. J., vol. 89, p. 32. $1\frac{1}{2}$ columns.

STOPING IN BARITE MINES, MISSOURI. T. A. I. M. E., vol. 40, p. 728. $6\frac{1}{2}$ pages. I.

See also OCCURRENCE OF BARYTES, and METHODS OF MINING, ETC., also COST OF STOPING.

Under-Sea Mining

SUBMARINE COAL MINING. By J. Johnson. J. M. Soc. N. S., vol. 13, p. 47. 4 pages.

SUBMARINE MINING. Min. Mag., vol. 8, p. 56. 4 pages.

SUBMARINE DIVERS IN MINES. By G. F. Duck. M. & M., vol. 31, p. 446. $1\frac{1}{2}$ columns.

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Mining Frozen Gravels

THAWING FROZEN GRAVEL IN THE NORTH. Min. & Sci. Press, vol. 98, p. 382. 3 columns. I.

THAWING FROZEN GRAVEL IN THE YUKON. Min. & Sci. Press, vol. 97, p. 354. 2 columns. I.

THAWING FROZEN GRAVEL. Min. & Sci. Press, vol. 97, p. 812. 2 columns. I.

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Packing Mine Workings: Flushing Culm, Use of Waste

SPACE OCCUPIED BY BROKEN STONE. M. & M., vol. 30, p. 334. $\frac{1}{2}$ column.

A FILLING METHOD OF MINING SOFT ORE. Min. & Sci. Press, vol. 99, p. 97. 4 columns. I.

THE FILLING SYSTEM APPLIED TO WIDE ORE BODIES. E. & M. J., vol. 87, p. 1178. 5 columns. I.

THE SPUELVERSATZ METHOD OF HYDRAULIC FILLING. E. & M. J., vol. 89, p. 306. 1 column. I.

FILLING METHOD OF MINING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 750. 2 columns.

THE FILLING SYSTEM AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 638. 2 columns. I.

FILLING STOPES IN THE AUSTRALIAN MINES. T. Au. I. M. E., vol. 7, p. 197. 18 pages. I.

FILLING STOPES WITH TAILING AT KALGOORLIE. Min. Mag., London, vol. 3, p. 452. 1 column. I.

THE FILLING SYSTEMS AT THE BROKEN HILL MINES, NEW SOUTH WALES. E. & M. J., vol. 86, p. 794. 4 columns. I.

FILLING STOPES IN THE AUSTRALIAN MINES. T. Au. I. M. E., vol. 7, p. 197. 18 pages. I.

FLUSHING IN METAL MINES. E. & M. J., vol. 86, p. 4. 1 column.

SILTING AT WAIHI. By A. Jarman. Min. Mag., London, vol. 3, p. 191. 8 columns. I.

FILLING METHOD OF MINING AT THE HOMESTAKE MINE. E. & M. J., vol. 90, p. 74. $7\frac{1}{2}$ columns. I.

FILLING IN THE CLIFTON-MORENCI MINES. Min. & Sci. Press, vol. 101, p. 831. $\frac{1}{2}$ column.

FILLING METHOD USED IN ARIZONA COPPER MINES. Min. & Sci. Press, vol. 99, p. 393. $\frac{1}{2}$ column.

ROCK FILLING AT RIO TINTO. By E. Levy. E. & M. J., vol. 89, p. 363. $2\frac{1}{2}$ columns.

FILLING METHOD OF MINING EMPLOYED IN THE COAHUILA DISTRICT, MEXICO. E. & M. J., vol. 89, p. 1073. $\frac{1}{2}$ column.

"DRY-WALL" FILLING METHOD IN THE SOUTH RANGE MINES, MICHIGAN. Min. & Sci. Press, vol. 96, p. 850. $\frac{1}{2}$ column. I.

See also METHODS OF MINING, ETC.

HYDRAULIC STOPE FILLING AT THE ROBINSON MINE. P. C. M. & M. Soc. S. A., vol. 10, p. 300. $\frac{1}{2}$ column.

FILLING STOPES AT THE SIMMER AND JACK. Min. Mag. London, vol. 4, p. 67. $1\frac{1}{2}$ columns. I.

FILLING METHOD EMPLOYED AT THE LOS PILARES MINE, MEXICO. M. & M., vol. 31, p. 109. $4\frac{1}{2}$ columns. I.

FILLING ABANDONED WORKINGS WITH CULM OR SAND: European Practice. By H. M. Payne. E. & M. J., vol. 89, p. 522. $4\frac{1}{2}$ columns. I.

SAND FILLING IN THE TRANSVAAL MINES. Min. & Sci. Press, vol. 101, p. 333. $\frac{1}{2}$ column.

SAND FILLING ON THE WITWATERSRAND. By E. Paur. P. C. M. & M. Soc. S. A., vol. 10, p. 429. $8\frac{1}{2}$ columns. I.

SAND FILLING ON THE CENTRAL RAND. E. & M. J., vol. 90, p. 59. 1 column.

SAND FILLING ON THE RAND. E. & M. J., vol. 90, p. 805. $\frac{1}{2}$ column.

SAND FILLING IN THE IRON MINES OF PEINE, GERMANY. T. A. I. M. E., vol. 39, p. 355. 2 pages.

See also DISPOSAL OF WASTE.

BACK FILLING BY FLUSHING IN THE SILESIA COAL MINES. E. & M. J. vol. 86, p. 889. $12\frac{1}{2}$ columns. I.

DISTRIBUTION OF FILLING IN THE SILESIA MINES: Dams, Pipes, Etc. E. & M. J., vol. 86, p. 891. 2 columns. I.

See also UNDERGROUND DAMS.

STOWING IN CARMAUX, FRANCE, COAL MINES. E. & M. J., vol. 86, p. 576. 4 columns. I.

ASHES FOR PILLARS IN COAL MINES. E. & M. J., vol. 86, p. 581. $\frac{1}{2}$ column.

THE FLUSHING PROBLEM IN THE ANTHRACITE REGION. E. & M. J., vol. 88, p. 564. $3\frac{1}{2}$ columns.

FLUSHING OLD WORKINGS. Coal Mining Supplement, E. & M. J., vol. 88, p. 21. $\frac{1}{2}$ column.

HYDRAULIC STOWING OF GOB AT SHAMROCK I AND II COLLIERY, HERNE, WESTPHALIA, GERMANY. By H. C. Annett. T. I. M. E., vol. 37, p. 257. 20 pages. I.

THE ADVANTAGES OF FLUSHING IN COAL MINING. By L. W. Mayer. E. & M. J., vol. 86, p. 1. $12\frac{1}{2}$ columns. I.

See also METHODS OF MINING COAL, MINE SUPPORT, SUBSIDENCE IN MINE WORKINGS, and COST OF SUPPORT.

River Mining

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Deep Mining

LIMITS OF DEEP MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 414. $2\frac{1}{2}$ columns.

DEPTH OF MINES AT BUTTE. E. & M. J., vol. 85, p. 97. Table.

DEEP MINING AT GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 348. 1 column.

DEEP MINING AT BENDIGO. By W. J. Rickard. Min. Mag., London, vol. 3, p. 281. 4 columns. I.

DEEP MINING IN TRANSVAAL. By R. GASCOYNE. Min. & Sci. Press, vol. 101, p. 332. $4\frac{1}{2}$ columns. I.

THE DEEP MINES OF KEWEENAW POINT, MICHIGAN. Min. & Sci. Press, vol. 96, p. 847. $\frac{1}{2}$ column.

DEEP MINING IN THE GUANAJUATO DISTRICT, MEXICO. By F. H. Robert. E. & M. J., vol. 90, p. 1310. $6\frac{1}{2}$ columns. I.

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Excavation of Earth, Rock and Ore, Use of Steam Shovels, Mechanical Excavators and Unloaders

EARTHWORK: The Profile of Quantities. By S. B. Fisher. P. E. Soc. W. Pa., vol. 3, p. 45. 4½ pages. D.

THE CULEBRA CUT OF THE PANAMA CANAL. By A. S. Zinn. J. W. Soc. E., vol. 12, p. 820. 19 pages. I.

POWER SHOVEL FOR UNDERGROUND WORK. E. & M. J., vol. 86, p. 1056. 2 columns. I.

THE THEW AUTOMATIC STEAM SHOVEL FOR UNDERGROUND WORK. M. & M., vol. 29, p. 575. 2 columns.

STEAM SHOVEL WORK AT ELY, NEVADA. Min. & Sci. Press, vol. 98, p. 59. 2 columns. I.

STEAM SHOVEL WORK IN BINGHAM CANYON, UTAH. Min. & Sci. Press, vol. 98, p. 518. 1½ columns. I.

STEAM SHOVEL IN THE AMUER REGION. Min. & Sci. Press, vol. 98, p. 731. 1 column. I.

STEAM SHOVEL IN COPPER MINING, ELY, NEVADA. By F. S. Pheby. Min. & Sci. Press, vol. 97, p. 161. 1 column. I.

BREAKING GROUND FOR STEAM SHOVELS: Gophering. E. & M. J., vol. 88, p. 696. 1½ columns.

MINING COPPER ORE WITH STEAM-SHOVELS. By L. A. Palmer. Min. Mag. London, vol. 4, p. 293. 5 columns. I.

THE DRAG-LINE EXCAVATOR. By J. P. Hutchins. Min. Mag., London, vol. 3, p. 359. 6½ columns. I.

A NEW TYPE OF GIANT EXCAVATOR. By F. A. Talbot. E. & M. J., vol. 90, p. 564. 2½ columns. I.

See also first volume of INDEX, and OPEN-CUT MINING.

Open-cut Mining, Milling Methods Etc.

STRIPPING CLINTON IRON ORE IN NEW YORK STATE. By E. Higgins. E. & M. J., vol. 86, p. 1150. 8 columns. I.

STRIPPING IN BINGHAM CANYON. E. & M. J., vol. 87, p. 1186. 1 column.

STRIPPING COAL BEDS. M. & M., vol. 31, p. 69. 4 columns. I.

STRIPPING AND OPEN-CUT WORK IN THE JOPLIN DISTRICT. M. & M., vol. 30, p. 503. 4 columns. I.

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OPEN-CUT MINING IRON ORES IN CUBA. M. & M., vol. 31, p. 247. 2 columns. I.

LOCATION OF OPEN-CUT PITS. M. & M., vol. 29, p. 343. ½ column.

OPEN-PIT IRON MINING ON THE MESABI RANGE. By J. F. Walf. M. & M., vol. 29, p. 291, 6 columns, I.; p. 343, 14 columns, I.

OPEN-CUT MINING AT THE PREMIER MINE, SOUTH AFRICA. E. & M. J., vol. 89, p. 370. 1½ columns. I.

OPEN-CUT MINING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 748. 2½ columns. I.

OPEN-CUT MINING IN THE LORRAINE OÖLITIC IRON ORE DEPOSITS OF GERMANY AND FRANCE. E. & M. J., vol. 87, p. 1224. 2 columns.

OPEN-CUT MINING IN ALASKA AND THE YUKON. Min. & Sci. Press, vol. 98, p. 587. 8 columns. I.

OPEN-CUT MINING IN THE TURQUOISE MINES OF NEW MEXICO. E. & M. J., vol. 86, p. 845. 1½ columns.

TIN MINING IN ULN SELANGOR, FEDERATED MALAY STATES. By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.

TONNAGE ESTIMATION IN DUMPS, OPEN CUTS, ETC. By R. J. Donaldson. E. & M. J., vol. 87, p. 640. 8½ columns. I.

HYDRAULIC EXCAVATION ON THE PANAMA CANAL. Min. & Sci. Press, vol. 100, p. 609. 7½ columns. I.

- MINING AND MILLING FLORIDA PHOSPHATES.** By C. A. Stone. E. & M. J., vol. 87, p. 490. 8 columns. I.
- STRIPPING A VEIN BY HYDRAULICKING.** By A. F. Hughes. Min. & Sci. Press, vol. 99, p. 788. 2½ columns. I.
- See also **HYDRAULIC MINING.**
- THE MILLING SYSTEM AS EMPLOYED IN MINING THE IRON ORES OF SUNRISE, WYOMING.** E. & M. J., vol. 85, p. 400. 3 columns. I.
- NOTES ON THE MILLING SYSTEM OF MINING.** By A. H. Fay. E. & M. J., vol. 88, p. 919. 2½ columns. I.
- THE MILLING SYSTEM OF MINING AT MOUNT MORGAN MINE.** E. & M. J., vol. 87, p. 836. 1 column.
- GLORY HOLE MINING AT DE LAMAR, NEVADA.** By W. R. Wardner. E. & M. J., vol. 87, p. 451. 6 columns. I.
- GLORY HOLE MINING AT PHOENIX, BRITISH COLUMBIA.** E. & M. J., vol. 88, p. 1260. 1½ columns. I.
- See also **MINING THICK AND MASSIVE DEPOSITS, EXCAVATION OF EARTH, ROCK AND ORE, ETC., COST OF METAL-MINING, and COST OF STRIPPING.**
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- See also first column of **INDEX**, and **COST OF MINE AND MILL CONSTRUCTION.**
- Hydraulic Mining: Methods and Appliances, Glants, Elevators, Etc.**
- HYDRAULIC MINING.** Min. & Sci. Press, vol. 20, p. 322. 1½ columns.
- NOTES ON HYDRAULIC MINING.** M. & M., vol. 28, p. 1. 8 pages. I.
- A WORD ABOUT HYDRAULIC MINING.** Min. & Sci. Press, vol. 20, p. 5. 1½ columns. I.
- HYDRAULIC MINING OF AURIFEROUS GRAVELS.** By J. W. Phillips. J. W. Soc. E., vol. 15, p. 431. 40 pages. I.
- EXAMINING AND FITTING UP A HYDRAULIC MINE.** By H. A. Brigham. E. & M. J., vol. 86, p. 1257, 10½ columns; vol. 87, p. 23, 19½ columns, I.
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- HYDRAULIC MINING ON THE PACIFIC COAST.** By A. H. Martin. M. & M., vol. 30, p. 261. 4½ columns. Maps.
- ART OF PLACER PIPING.** By D. H. Stovall. Min. & Sci. Press, vol. 99, p. 661. 2½ columns. I.
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- THE HYDRAULIC EQUIPMENT OF THE OLD CHANNEL MINES.** By J. M. Nicol. Min. & Sci. Press, vol. 95, p. 333. 6 columns. I.
- PUMP SLUICING FOR GOLD.** By H. Herman. Min. & Sci. Press, vol. 98, p. 252. 2½ columns.
- GRAVEL PUMP MINING, WESTERN AUSTRALIA.** T. Au. I. M. E., vol. 8, pt. 1, p. 33. 4 pages.
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- SLUICES USED IN THE LA GRANGE HYDRAULIC MINE.** Min. & Sci. Press, vol. 97, p. 492. 3 columns. I.

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- THE LONG TOM AND HYDRAULIC MINING IN CALIFORNIA.** By R. H. Campbell. Min. & Sci. Press, vol. 100, p. 934. 3 columns. I.
- DROP SLUICES: Undercurrents.** By D. H. Stovall. Min. & Sci. Press, vol. 100, p. 801. 1½ columns. I.
- UNDERCURRENTS USED IN THE SOUTH AFRICAN TIN FIELDS.** E. & M. J., vol. 89, p. 471. 1 column. I.
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- HAND SLUICING AT NOME AND THE YUKON.** Min. & Sci. Press, vol. 98, p. 86. 8 columns. I.
- DITCHES IN HYDRAULIC MINING.** E. & M. J., vol. 87, p. 28. 1½ columns.
- THE YUKON DITCH.** By T. A. Rickard. Min. & Sci. Press, vol. 98, p. 117, 7½ columns, I.; p. 148, 6½ columns, I.
- THE BONANZA DITCH OF THE YUKON GOLD COMPANY.** By E. Jacobs. E. & M. J., vol. 88, p. 457. 2 columns. I.
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- See also **FLUMES: MATERIALS OF CONSTRUCTION AND DESIGN, and DITCHES AND CHANNELS.**
- HYDRAULICKING PIPE-CLAY GRAVEL.** D. H. Stovall. Min. & Sci. Press, vol. 100, p. 159. 2½ columns. I.
- HYDRAULICKING THE COVER OFF A VEIN.** Min. & Sci. Press, vol. 99, p. 788. 2½ columns. I.
- HYDRAULIC ELEVATORS.** E. & M. J., vol. 87, p. 27. 1 column.
- GRAVEL ELEVATION IN SISKIYOU COUNTY, CALIFORNIA.** By C. S. Haley. Min. & Sci. Press, vol. 101, p. 701. 2½ columns. I.
- THE RUBLE HYDRAULIC ELEVATOR.** By J. McD. Porter. E. & M. J., vol. 88, p. 1213. 5 columns. I.
- THE RUBLE BOULDER AND GRAVEL ELEVATOR.** E. & M. J., vol. 86, p. 902. 3 columns. I.
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- See also **ELEVATORS.**
- HYDRAULIC SUCTION ELEVATOR.** By D. B. Waters. T. Au. I. M. E., vol. 11, p. 114. 6 pages. I.
- A ROCKER.** By D. Waterman. Min. & Sci. Press, vol. 98, p. 293. 1½ columns. I.
- THE BUTARA OR WASHING MACHINE FOR GOLD GRAVELS IN SIBERIA.** Min. & Sci. Press, vol. 99, p. 423. ¼ column. I.
- STEAM SCRAPER FOR PLACER MINING.** By H. W. Turner. Min. & Sci. Press, vol. 97, p. 191. ¼ column. I.
- BUCKET SCRAPER FOR USE IN PLACER MINING.** Min. & Sci. Press, vol. 101, p. 43. 2 columns. I.
- See also **EXCAVATION OF EARTH, ROCK, ETC.**
- STACKER FOR HYDRAULICKING.** By S. S. Smith. Min. & Sci. Press, vol. 100, p. 290. 3 columns. I.
- See also **DREDGING FOR GOLD AND OTHER MATERIALS.**
- DIFFERENT METHODS OF ALLUVIAL MINING IN VICTORIA.** By S. Hunter. T. Au. I. M. E., vol. 8, pt. 2, p. 188. 2 pages.
- ALLUVIAL WORKINGS AT ADDISON'S FLAT, NEW ZEALAND.** By A. G. Macdonald. E. & M. J., vol. 87, p. 198. 4 columns. I.
- METHODS OF WORKING ALLUVIAL DEPOSITS OF VICTORIA.** T. I. M. & M., vol. 17, p. 224. 4 pages. I.

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- HYDRAULIC SLUICING IN AUSTRALIA.** T. Au. I. M. E., vol. 12, p. 34. 14 pages.
- HYDRAULICKING IN CALIFORNIA.** By H. P. Gordon. Min. & Sci. Press, vol. 100, p. 751. 3½ columns. I.
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- CLEANING UP AN OLD MILL YARD: Hydrauliccking a Mill Site for Gold in California.** By W. H. Storms. E. & M. J., vol. 89, p. 646. 3 columns. I.
- MINING DIAMONDS AT BAHIA, BRAZIL.** E. & M. J., vol. 87, p. 986. 3 columns. I.
- See also OCCURRENCE OF DIAMONDS and BRAZIL.
- HYDRAULICKING PLATINUM DEPOSITS IN BRITISH COLUMBIA.** J. C. M. I., vol. 13, p. 313. 5 pages. I.
- HYDRAULIC MINING AT SAN ANTONIO, PERU.** Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- PHILIPPINE PLACER MINING.** Min. & Sci. Press, vol. 99, p. 267. ¾ column.
- THE BRANDY CITY HYDRAULIC MINE.** By G. F. Taylor. E. & M. J., vol. 89, p. 1152. 3 columns. I.
- METHOD OF WORKING LUMPKIN COUNTY PLACERS, GEORGIA.** Min. Mag., vol. 10, p. 469.
- GOLD MINING BY THE HYDRAULIC PROCESS IN NORTH CAROLINA AND GEORGIA.** By T. L. Clingman. Min. Mag., vol. 10, p. 27. 4 pages.
- PROSPECTING AND MINING GOLD PLACERS IN ALASKA.** By J. P. Hutchins. U. S. G. S., Bull. 345, p. 54. 24 pages. 1907.
- See also PROSPECTING, ETC.
- HYDRAULIC MINING IN ALASKA.** By T. A. Rickard. Min. Mag., London, vol. 1, p. 139. 6 columns. I.
- PLACER MINING IN ALASKA IN 1904.** By A. H. Brooks. U. S. G. S., Bull. 259, p. 18. 13 pages.
- METHODS AND COSTS OF GRAVEL AND PLACER MINING IN ALASKA.** By C. W. Purington. U. S. G. S., Bull. 263. 273 pages. I. 1905.
- NOME PLACER MINING.** By T. M. Gibson. Min. & Sci. Press, vol. 101, p. 809. 3½ columns.
- PLACER MINING IN THE YUKON-TANANA REGION, ALASKA.** By C. E. Ellsworth. U. S. G. S., Bull. 442, p. 230. 16 pages. 1909.
- MINING IN THE FAIRHAVEN PRECINCT.** By F. F. Henshaw. U. S. G. S., Bull. 379, p. 355. 15 pages. I. 1908.
- PLACER GOLD MINING IN INTERIOR ALASKA.** E. & M. J., vol. 87, p. 591. 9 columns.
- PLACER MINING OPERATIONS IN ALASKA IN 1909.** By A. H. Brooks. E. & M. J., vol. 90, p. 412. 8¼ columns. Map.
- MINING AND MINING METHODS OF THE YUKON.** By A. A. Bare. J. C. M. I., vol. 11, p. 545. 24 pages. I.
- HYDRAULIC MINING IN COLOMBIA.** Min. & Sci. Press, vol. 98, p. 220. ½ column. I.
- THE CARIBOO CONSOLIDATED HYDRAULIC PLANT, BULLION, BRITISH COLUMBIA.** By W. J. Dick. J. C. M. I., vol. 10, p. 418. 8 pages.
- HYDRAULIC MINING IN CARIBOO.** By D. Waterman. Min. & Sci. Press, vol. 95, p. 302. 5 columns. I.
- TIN SLUICING IN TASMANIA.** By E. Edwards. M. & M., vol. 31, p. 309. 12 columns. I.

HYDRAULIC MINING FOR TIN IN THE MALAY STATES. Min. & Sci. Press, vol. 98, p. 32. 7 columns. I.

GROUND-SLUCING IN THE MALAY STATES. Min. & Sci. Press, vol. 98, p. 34. 3 columns. I.

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TIN PLACER MINING IN THE BOLIVIAN ANDES. E. & M. J., vol. 90, p. 1054. $\frac{1}{2}$ column.

HYDRAULIC MINING IN TIN MINES OF CAPE COLONY. P. C. M. & M. Soc. S. A., vol. 8, p. 171. 8 columns. I.

See also COST OF PIPES AND PIPE LAYING.

See also COST OF FLUME CONSTRUCTION and COST OF HYDRAULIC MINING, also COST OF MINE AND MILL CONSTRUCTION.

Dredging for Gold and Other Materials: Practice and Appliances

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DEVELOPMENTS IN GOLD DREDGING DURING 1908. By J. P. Hutchins. E. & M. J., vol. 87, p. 200. 9 columns.

DEVELOPMENT OF DREDGES FOR PLACER DEPOSITS. By G. B. Massey. E. & M. J., vol. 87, p. 833. $7\frac{1}{2}$ columns. I.

EVOLUTION OF THE CALIFORNIA DREDGE. By G. L. Hurst. M. & M., vol. 29, p. 401. $2\frac{1}{2}$ columns. I.

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NEW MACHINERY FOR RIVER EXPLORATION: Dredging, Etc. Min. Mag., vol. 4, p. 61. $7\frac{1}{2}$ pages. I.

DREDGING FOR GOLD. Min. Mag., London, vol. 2, p. 217. 7 columns. I.

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TAPERED TIMBER PROPS. P. C. M. & M. Soc. S. A., vol. 9, p. 369. $1\frac{1}{2}$ columns.

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MINE TIMBERING IN FRANCE. E. & M. J., vol. 88, p. 1172. 1 column. I.

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RETIMBERING OF THE KEARSARGE SHAFT. By L. Fraser. Min. & Sci. Press, vol. 95, p. 432. $2\frac{1}{2}$ columns. I.

A METHOD FOR SETTING TIMBER IN INCLINED SHAFTS. By C. W. McDougall. E. & M. J., vol. 87, p. 656. $2\frac{1}{2}$ columns. I.

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- FALSE SET FOR SPILING GROUND.** By J. Humes. E. & M. J., vol. 89, p. 698. $3\frac{1}{2}$ columns. I.
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- DRIFT TIMBERING FOR HEAVY GROUND.** E. & M. J., vol. 89, p. 1101. 1 column. I.
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MINE SAMPLING AND CHEMICAL ANALYSIS OF COALS TESTED AT THE UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By J. S. Burtows. U. S. G. S., Bull. 362. 23 pages. 1908.

THE IMPORTANCE OF UNIFORM AND SYSTEMATIC COAL MINE SAMPLING. By J. S. Burtows. U. S. G. S., Bull. 316, p. 486. 32 pages. I. 1906.

SAMPLING AT COAL MINES. M. & M., vol. 31, p. 91. 1 column. I.

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MODERN PRACTICE OF ORE SAMPLING. By D. W. Brunton. Min. & Sci. Press, vol. 99, p. 593. 8 columns. I.

MODERN PRACTICE IN ORE SAMPLING. By D. W. Brunton. T. A. I. M. E., vol. 40, p. 567. 29 $\frac{1}{2}$ pages. I.

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SAMPLING OF COBALT-SILVER ORES. E. & M. J., vol. 90, p. 809. ¾ column.

SAMPLING ORES AT THE AUBURN MILL, NEVADA. Min. & Sci. Press, vol. 22, p. 248. ¼ column.

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SAMPLING OF MINE DUMPS. By H. S. Munroe. Sch. Mines Quart., vol. 29, p. 233. 5 pages. I.

SAMPLING OF MINE DUMPS. By H. S. Munroe. Min. & Sci. Press, vol. 96, p. 711. 2 columns. I.

CHURN DRILL GRAVEL SAMPLING. By J. P. Keene. Min. & Sci. Press, vol. 99, p. 289. 2½ columns.

CHURN DRILL SAMPLING. By W. E. Thorne. Min. & Sci. Press, vol. 98, p. 358. 3½ columns. I.

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MINE SIGNALS IN CALIFORNIA. Min. & Sci. Press, vol. 98, p. 702. $1\frac{1}{2}$ columns.

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ON MINING SURVEYS. By A. Beau-lands. Min. Mag., vol. 9, p. 337. 3 pages.

THE PRACTICAL MINER'S GUIDE: A Means of Calculating Distances on Inclines and Distances to Raise and Drift; Surveying. Min. Mag., vol. 9, p. 31, 4 pages, I., Table; p. 121, 33 pages, I.; p. 197, 16 pages; p. 293, 4 pages, Table; p. 391, 11 pages, Tables; vol. 8, p. 260, 8 pages; p. 355, 6 pages; p. 460, 4 pages, D.; p. 508, 18 pages.

ACCURACY IN SURVEYING. By L. Fraser. Min. & Sci. Press, vol. 99, p. 332. 1½ columns. D.

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DETERMINATION OF MERIDIAN. M. & M., vol. 31, p. 682. 1 column.

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SEPARATE LEAF SYSTEM FOR RECORDING SURVEY NOTES. By L. Fraser. E. & M. J., vol. 88, p. 1268. 5 columns. D.

SURVEYING THE PUBLIC LAND OF THE UNITED STATES. By H. W. MacFarrren. Min. & Sci. Press, vol. 100, p. 189. 8 columns. D.

PLOTTING COORDINATE SURVEYS. By J. J. Bristol. Min. & Sci. Press, vol. 100, p. 487, 8 columns, I.; p. 524, 7½ columns, I.

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EFFECT OF THE INCLINATION OF THE STADIA ROD UPON STADIA DISTANCES. By B. Levitt. Sch. Mines Quart., vol. 31, p. 26. 19 pages. D.

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A TIME-SAVING STADIA CHART. M. & M., vol. 30, p. 268. 2 columns. I.

A NEW METHOD OF MEASURING HEIGHTS BY MEANS OF THE BAROMETER. By G. K. Gilbert. U. S. G. S., 2d Ann. Rept., pp. 403-566. 1880-81. I.

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Magnetic Surveys

MAGNETIC DECLINATION IN THE UNITED STATES. By H. Gannett. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 203-440. 1895-96. I.

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A DURABLE TRIANGULATION STATION. M. & M., vol. 31, p. 23. ¼ column. I.

TRIANGULATION AND SPIRIT LEVELING. By H. M. Wilson and others. U. S. G. S., 18th Ann. Rept., pt. 1, pp. 131-422, 1896-97; 19th Ann. Rept., pt. 1, pp. 145-408, 1897-98; 20th Ann. Rept., pt. 1, pp. 211-530, 1898-99; 21st Ann. Rept., pt. 1, pp. 205-582, 1899-1900.

TRIANGULATION AND SPIRIT LEVELING IN INDIAN TERRITORY. By C. H. Fitch. U. S. G. S., Bull. 175. 141 pages. Map. 1900.

ON METHODS OF MAKING LARGE SCALE CONTOUR SURFACE PLANS OF CLAIMS OR MINING PROPERTIES. By W. H. Boyd. J. C. M. I., vol. 13, p. 444. 11 pages. D.

CONTOURING ON MINING PROPERTIES WITH THE AID OF THE TACHEOMETER. By H. P. Scale. T. Au. I. M. E., vol. 6, p. 62. 24½ pages. I.

MANUAL OF TOPOGRAPHIC METHODS. By H. Gannett. U. S. G. S., Bull. 307. 88 pages. I. 1906.

COOPERATION IN TOPOGRAPHY, HYDROGRAPHY AND GEOLOGY, BETWEEN THE UNITED STATES GEOLOGICAL SURVEY AND THE VARIOUS STATE GOVERNMENTS. By E. W. Parker. J. M. Soc. N. S., vol. 13, p. 109. 15 pages.

TOPOGRAPHIC ENGINEERING. By W. D. Blackburn. E. & M. J., vol. 87, p. 997. 3 columns.

A BALLOON SURVEY. By W. S. Weeks. E. & M. J., vol. 87, p. 1079. 1½ columns. I.

SURVEY OF THE NORTHWESTERN BOUNDARY OF THE UNITED STATES, 1857-1861. By M. Baker. U. S. G. S., Bull. 174. 78 pages. Map. 1900.

SURVEY OF THE BOUNDARY LINE BETWEEN IDAHO AND MONTANA FROM THE INTERNATIONAL BOUNDARY TO THE CREST OF THE BITTERROOT MOUNTAINS. By R. W. Goode. U. S. G. S., Bull. 170. 67 pages. I. 1900.

LOCATION AND SURVEY OF RESERVOIR SITES. By A. H. Thompson. U. S. G. S., 12th Ann. Rept., pt. 2, pp. 1-212. 1890-91. I.

COMPENSATING GRADES FOR MINE RAILROAD SIDINGS. By R. D. N. Hall. M. & M., vol. 31, p. 768. 2 columns.

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TONNAGE ESTIMATION IN DUMPS, OPEN-CUTS, ETC. E. & M. J., vol. 87, p. 1011. 3 columns.

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MODERN METHODS IN MINE SURVEYING. By H. W. Gastrell. T. Au. I. M. E., vol. 13, p. 194. 16 pages. I.

DETAILS OF MINE SURVEYING. By A. E. Robinson. Min. & Sci. Press, vol. 101, p. 294. 11½ columns. I.

MINE SURVEYING AND OFFICE METHODS. By C. Enzian. Coal Mining Supplement, E. & M. J., vol. 88, p. 36. 15 columns. I.

MINE SURVEY NOTES. By G. W. Riter. T. A. I. M. E., vol. 41, p. 790. 7 pages.

MINE SURVEYING HINTS. By E. D. North. Min. & Sci. Press, vol. 98, p. 261. 1½ columns. I.

SURVEYING AND MAPPING IN THE GRANBY MINES. J. C. M. I., vol. 11, p. 403. 1½ pages.

See also MAP MAKING.

MINE SURVEYING METHODS EMPLOYED AT BUTTE, MONTANA. By P. A. Gow. E. & M. J., vol. 90, p. 1209. 8½ columns. I.

COLLIERY SURVEY NOTES. By R. Shumway. M. & M., vol. 31, p. 61. 1½ columns. I.

SURVEYING AT LYTLE COLLIERY. By J. H. Hærtter. M. & M., vol. 29, p. 108. 5½ columns. I.

COLLIERY SURVEYS. By D. Harrington. M. & M., vol. 30, p. 94, 6½ columns; p. 234, 2½ columns; p. 305, 5½ columns; p. 337, 5 columns, I.; p. 439, 5 columns.

SURVEYING AN INACCESSIBLE STOPE. By A. E. Robinson. Min. & Sci. Press, vol. 101, p. 678. 1½ columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 9, p. 375. 28 columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 10, p. 18, 1½ columns; p. 63, 3½ columns, I.; p. 105, 2 columns; p. 140, 2½ columns, I.; p. 369, 7½ columns.

TUNNEL SURVEY IN AN ANTHRACITE COLLIERY. By D. P. Jones. E. & M. J., vol. 89, p. 881. 2½ columns. I.

UNDERGROUND CURVES. E. & M. J., vol. 89, p. 1149. 1 column. I.

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PLUMBING A DEEP SHAFT. Min. & Sci. Press, vol. 95, p. 427. 1½ columns.

PLUMBING A SHAFT IN THE ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 37. 2½ columns. I.

MODERN METHOD OF PLUMBING A SHAFT. By J. P. Davis. E. & M. J., vol. 89, p. 1174. 5 columns. I.

MINE SURVEYING: With Special Reference to Shaft Surveying. By C. E. Morrison. Sch. Mines Quart., vol. 29, p. 34. 12 pages. I.

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Methods of Transportation

TRANSPORTATION. By R. Reford. J. M. Soc. N. S., vol. 12, p. 23. 34 pages.

COAL MINE TRANSPORTATION. By E. B. Wilson. M. & M., vol. 31, p. 408. 3½ columns. I.

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TRANSPORTATION IN NICARAGUA. T. A. I. M. E., vol. 41, p. 602. 2 pages.

TRAVEL IN COLOMBIA. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 350. 4 columns. Map.

PNEUMATIC TRANSPORTATION OF COAL. E. & M. J., vol. 89, p. 674. ½ column.

See also **COMPRESSED AIR IN MINING.**

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MULE-BACK TRANSPORTATION OF SECTIONALIZED MACHINERY. By F. C. Roberts and W. W. Bradley. Min. & Sci. Press, vol. 98, p. 751. 9½ columns. I.

TRANSPORTATION BY SLUICE. E. & M. J., vol. 85, p. 1058. 1 column.

TRANSPORTATION OF COAL BY FLUME. By R. M. Magraw. M. & M., vol. 30, p. 236. 6 columns. I.

TRANSPORT OF MACHINERY IN MOUNTAINOUS COUNTRIES. By H. H. Kress and A. S. Cameron. Min. & Sci. Press, vol. 95, p. 471. 2 columns. I.

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STEEL RAILS FOR PRESENT SERVICE: Their Manufacture and Their Failures. By P. H. Dudley. J. W. Soc. E., vol. 13, p. 471. 17½ pages. I.

ON THE DURABILITY OF RAILROAD IRON. By W. Truran. Min. Mag., vol. 4, p. 248, 10 pages; vol. 5, p. 291, 2 pages.

STANDARD RAIL SECTIONS AND FISH BAR JOINTS. By W. R. Jones. P. E. Soc. W. Pa., vol. 3, p. 33. 21 pages. I.

COMPARISON OF AMERICAN AND FOREIGN RAIL SPECIFICATIONS, WITH A PROPOSED STANDARD SPECIFICATION TO COVER AMERICAN RAILS ROLLED FOR EXPORT: A Discussion of A. L. Colby Paper. T. A. I. M. E., vol. 38, p. 916. 7 pages.

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MACADAM ROADS AND THEIR PRESERVATION. By L. W. Page. J. W. Soc. E., vol. 15, p. 57. 23 pages.

SPECIFICATIONS AND NOTES ON MACADAM ROAD CONSTRUCTION. By A. N. Johnson. J. W. Soc. E., vol. 13, p. 767. 25 pages.

PRELIMINARY REPORT ON GEOLOGY OF COMMON ROADS OF UNITED STATES. By N. S. Shaler. U. S. G. S., 15th Ann. Rept., pp. 1-110. 1893-94.

FREIGHTING ORE WITH BIG STRING TEAMS. By G. C. McFarlane. E. & M. J., vol. 87, p. 1078. 4 columns.

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ROAD DISTANCES IN NEVADA. Min. & Sci. Press, vol. 95, p. 748. $\frac{1}{2}$ column.

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TRANSPORTATION FACILITIES IN ALASKA AND THE YUKON. By W. M. Brewer. Min. & Sci. Press, vol. 98, p. 485. $5\frac{1}{2}$ columns. Map.

THE NILE AS A MINING RIVER. By A. Del Mar. Min. & Sci. Press, vol. 95, p. 463. $5\frac{1}{2}$ columns. I.

WATER TRANSPORTATION IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 88, p. 301. $4\frac{1}{2}$ columns.

THE OHIO RIVER: Improvement for Navigation. By J. W. Arras. P. E. Soc. W. Pa., vol. 24, p. 241. 37 pages. I.

THE MONONGAHELA RIVER: Methods of Improvement of Navigation. By T. P. Roberts. P. E. Soc. W. Pa., vol. 24, p. 193. 28 pages. I.

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MEASUREMENT OF VENTILATING CURRENTS IN THE COMSTOCK MINES, NEVADA. T. A. I. M. E., vol. 41, p. 40. 2 pages.

See also first volume of INDEX.

Tests on Fans

METHOD OF TESTING A FAN. E. & M. J., vol. 85, p. 1013. 1½ columns.

TEST OF A WADDLE FAN. By G. L. Kerr. M. & M., vol. 30, p. 294. 4½ columns. I.

MINE FAN TESTS. P. C. M. & M. Soc. S. A., vol. 7, p. 306. 1 column.

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Efficiency of Fans

See first volume of INDEX.

Application of Ventilating Methods to Metal and Coal Mines

VENTILATION AT BENDIGO, AUSTRALIA. Min. & Sci. Press, vol. 93, p. 601. ½ column.

VENTILATION IN DEEP MINES. Min. & Sci. Press, vol. 93, p. 629. 2 columns.

See first volume of INDEX.

WATER

Source and Supply of Water

- AMOUNT OF FREE WATER IN THE EARTH'S CRUST.** M. & M., vol. 29, p. 539. $\frac{1}{2}$ column.
- VOLCANIC WATERS.** By J. H. Hastings. Min. & Sci. Press, vol. 97, p. 229. 6 columns.
- See also **AIR-BLASTS, VOLCANOES, AND EARTHQUAKES.**
- WATERS, METEORIC AND MAGMATIC.** By J. F. Kemp. Min. & Sci. Press, vol. 96, p. 705, $6\frac{1}{2}$ columns; p. 872, $6\frac{1}{2}$ columns, I.
- UNDERGROUND WATERS AND SEMI-ARID REGIONS.** By W. C. Mendenhall. Min. & Sci. Press, vol. 99, p. 496. 1 column.
- RATIO OF MINE WATER TO RAINFALL.** M. & M., vol. 29, p. 248. $\frac{1}{2}$ column.
- PRINCIPLES AND CONDITIONS OF THE MOVEMENTS OF GROUND WATER.** By F. H. King. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 59-294. 1897-98. I.
- THEORETICAL INVESTIGATION OF MOTION OF GROUND WATERS.** By C. S. Slichter. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 295-384. 1897-98. I.
- See also **THEORY OF ORE DEPOSITS, ETC.**
- WATER SUPPLY FOR KALGOORLIE.** By M. W. Von Bernewitz. Min. & Sci. Press, vol. 96, p. 709. $2\frac{1}{2}$ columns.
- NEW WATER SUPPLY FOR GOLDFIELD.** E. & M. J., vol. 85, p. 306. $1\frac{1}{2}$ columns.
- WATER LOSSES AT BROKEN HILL.** By T. H. Palmer. E. & M. J., vol. 87, p. 851. 5 columns.
- REQUISITE AND QUALIFYING CONDITIONS OF ARTESIAN WELLS.** By T. C. Chamberlin. U. S. G. S., 5th Ann. Rept., pp. 125-173. 1883-84. I.
- PRELIMINARY REPORT ON ARTESIAN WATERS OF A PORTION OF THE DA-KOTAS.** By N. H. Darton. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 603-694. 1895-96. I.
- THE CRETACEOUS FORMATIONS OF TEXAS WITH SPECIAL REFERENCE TO ARTESIAN WATERS.** By R. T. Hill. U. S. G. S., 21st Ann. Rept., pt. 7, 666 pages. 1899-1900. I.
- ARTESIAN WELL PROSPECTS IN THE ATLANTIC COASTAL PLAIN REGION.** By N. H. Darton. U. S. G. S., Bull. 138. 232 pages. I. 1896.
- CONTROLLING FACTORS OF ARTESIAN FLOWS.** By M. L. Fuller. U. S. G. S., Bull. 319. 46 pages. 1908.
- THE ARTESIAN WELL AT CHARLESTON.** By R. N. Lynch. Min. Mag., vol. 1, p. 251. $5\frac{1}{2}$ pages.
- A WATER POWER RECONNAISSANCE IN SOUTHEASTERN ALASKA.** By J. C. Hoyt. U. S. G. S., Bull. 442, p. 147. 11 pages. I. 1909.
- WATER SUPPLY OF THE YUKON-TANANA REGION, 1909.** By C. E. Ellsworth. U. S. G. S., Bull. 442, p. 251. 33 pages. 1909.
- WATER SUPPLY INVESTIGATIONS IN SEWARD PENINSULA.** By F. F. Henshaw. U. S. G. S., Bull. 379, p. 370, 32 pages, 1908; Bull. 442, p. 372, 44 pages, 1909.
- WATER SUPPLY OF THE YUKON-TANANA REGION, 1907-1908.** By C. C. Covert and C. E. Ellsworth. U. S. G. S., Bull. 379, p. 201. 28 pages. 1908.
- UNDERGROUND WATERS OF BISBEE, ARIZONA.** Min. & Sci. Press, vol. 99, p. 360. $\frac{1}{2}$ column.
- GEOLOGY AND UNDERGROUND WATER RESOURCES OF NORTHERN LOUISIANA AND SOUTHERN ARKANSAS.** By A. C. Veatch. U. S. G. S., Professional Paper 46. 422 pages. I. 1906.
- SIXTY YEARS OF RAINFALL IN CALIFORNIA.** By A. G. McAdie. Min. & Sci. Press, vol. 101, p. 640. 3 columns. D.

- WATER CONDITIONS IN THE OIL FIELD AT COALINGA.** By R. P. McLaughlin. Min. & Sci. Press, vol. 101, p. 305. 2 columns.
- UNDERGROUND WATER OF THE ARKANSAS VALLEY IN EASTERN COLORADO.** By G. K. Gilbert. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 551-601. 1895-96. I.
- GEOLOGY AND UNDERGROUND WATERS OF THE ARKANSAS VALLEY IN EASTERN COLORADO.** By N. H. Darton. U. S. G. S., Professional Paper 52, 90 pages. I. 1906.
- GEOLOGY AND WATER RESOURCES OF THE SNAKE RIVER PLAINS OF IDAHO.** By I. C. Russell. U. S. G. S., Bull. 199. 192 pages. I. 1902.
- WATER RESOURCES OF ILLINOIS.** By F. Leverett. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 695-849. 1895-96. I.
- WELL WATERS OF OHIO AND INDIANA.** By F. Leverett. U. S. G. S., 18th Ann. Rept., pt. 4, pp. 419-560. 1896-97. I.
- PRELIMINARY REPORT ON GEOLOGY AND WATER RESOURCES OF NEBRASKA WEST OF THE ONE HUNDRED AND THIRD MERIDIAN.** By N. H. Darton. U. S. G. S., 19th Ann. Rept., pt. 4, pp. 719-785. 1897-98. I.
- PRELIMINARY REPORT ON THE GEOLOGY AND WATER RESOURCES OF CENTRAL OREGON.** By I. C. Russell. U. S. G. S., Bull. 252. 138 pages. I. 1905.
- PRELIMINARY DESCRIPTION OF THE GEOLOGY AND WATER RESOURCES OF THE SOUTHERN HALF OF THE BLACK HILLS AND ADJOINING REGIONS IN SOUTH DAKOTA AND WYOMING.** By N. H. Darton. U. S. G. S., 21st Ann. Rept., pt. 4, pp. 489-599. 1899-1900. I.
- THE GEOLOGY AND WATER RESOURCES OF THE BIGHORN BASIN, WYOMING.** By C. A. Fisher. U. S. G. S., Professional Paper 53. 72 pages. I. 1907.
- GEOLOGY AND WATER RESOURCES OF THE NORTHERN PORTION OF THE BLACK HILLS AND ADJOINING REGIONS IN SOUTH DAKOTA AND WYOMING.** By N. H. Darton. U. S. G. S., Professional Paper 65. 105 pages. I. 1909.
- NATURAL MINERAL WATERS OF THE UNITED STATES.** By A. C. Peale. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 49-88. 1892-93. I.
- PALATABLE WATERS OF EASTERN UNITED STATES.** By W. J. McGee. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 1-47. 1892-93.
- THE PUBLIC LANDS AND THEIR WATER-SUPPLY.** By F. H. Newell. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 457-533. 1894-95. I.
- WATER RESOURCES OF A PORTION OF THE GREAT PLAINS.** By R. Hay. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 535-588. 1894-95. I.
- GEOLOGY AND UNDERGROUND WATER RESOURCES OF THE CENTRAL GREAT PLAINS.** By N. H. Darton. U. S. G. S., Professional Paper 32. 433 pages. I. 1905.
- WATER SUPPLY FOR IRRIGATION.** By F. H. Newell. U. S. G. S., 13th Ann. Rept., pt. 3, pp. 1-99. 1891-92. I.
- A NOTE ON ALLEGHENY RIVER WATER.** By F. C. Phillips. P. E. Soc. W. Pa., vol. 2, p. 279. 4½ pages. D.
- PECULIAR WATER PROBLEM AT CANDELARIA MINES, CHIHUAHUA, MEXICO.** By G. A. Laird. E. & M. J., vol. 90, p. 658. 5 columns.
- TAILING DAMS AND CONSERVATION OF MILL WATER.** By W. H. Storms. E. & M. J., vol. 90, p. 266. 7 columns. I.
- See also DAMS FOR MINING PURPOSES and CONSERVATION.

Measurement of Water

- DISCHARGE FORMULAS FOR CAST IRON PIPE.** By G. L. Bean. Min. & Sci. Press, vol. 98, p. 666. 2½ columns. Table.

SOLUTION OF KUTTER'S FORMULA. By L. I. Hewes and J. W. Roe. Min. & Sci. Press, vol. 99, p. 429. 2½ columns. I.

A GRAPHIC SOLUTION OF KUTTER'S FORMULA. By L. I. Hewes and Joseph W. Roe. T. A. I. M. E., vol. 40, p. 231. 15½ pages. I.

RESULTS OF STREAM MEASUREMENTS. By F. H. Newell. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 89-155. 1892-93. I.

WEIR MEASUREMENT OF WATER. Min. & Sci. Press, vol. 99, p. 265. 3 columns. Tables.

VELOCITY OF FLOW OF WATER IN PIPES. By L. M. Green. Min. & Sci. Press, vol. 99, p. 157. 3½ columns.

TABLE OF WATER GAUGES. E. & M. J., vol. 87, p. 1130. 1 column.

WEIGHT OF WATER PER CUBIC FOOT. By C. D. Demond. Min. & Sci. Press, vol. 95, p. 620. 2 columns. Table.

See also **WEIGHTS AND MEASURES.**

Pollution and Purification of Water

THE POLLUTION OF STREAMS BY SPENT GAS-LIQUORS FROM COKE OVENS, AND THE METHODS ADOPTED FOR ITS PREVENTION. By H. M. Wilson. T. I. M. E., vol. 39, p. 71. 24 pages. I.

ADMINISTRATION OF PENNSYLVANIA LAWS RESPECTING STREAM POLLUTION. By F. H. Snow. P. E. Soc. W. Pa., vol. 23, p. 266. 17½ pages.

NOTE ON A DEPOSIT OF SULPHUR IN A COLLIERY WATER. By G. H. Stanley. T. I. M. E., vol. 36, p. 223. 4 pages.

MINERAL IN UNDERGROUND WATERS. Min. & Sci. Press, vol. 95, p. 590. 1½ columns.

See also first volume of **INDEX.**

Water in Milling

WATER REQUIRED PER TON OF ORE TREATED. M. & M., vol. 29, p. 407. ½ column.

WATER REQUIRED FOR CONCENTRATING MACHINERY. M. & M., vol. 29, p. 380. ½ column.

WATER REQUIRED FOR CONCENTRATING MACHINERY. P. C. M. & M. Soc. S. A., vol. 10, p. 23. ½ column.

NOTES ON THE STAMP MILL WATER FEED AND PACKED UP DIES INTRODUCING THE SHALLOW FRONT MORTAR BOX. By H. T. Pitt. P. C. M. & M. Soc. S. A., vol. 8, p. 373. 6½ columns. I.

SALT WATER IN STAMP MILLS. By T. A. Rickard. Min. & Sci. Press, vol. 98, p. 860. 3½ columns.

See also **COST OF WATER.**

LIST OF PUBLICATIONS INDEXED

Publications, indexed (abbreviations).	Volumes indexed in first volume of Index (inclusive).	Volumes indexed in second volume of Index (inclusive).	Remarks.
Am. Jour. Min.	1-7	See E. & M. J.
Coll. Engr.	14-17	{ See Coll. Engr. & Met.
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Engineering, London.	63-79	{ See Coll. Engr.
E. & M. J.	8-84	85-90	{ For mining subjects only
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It has been found impracticable to index all subjects considered in the references given in this work, but it is hoped that the present index will prove to be amply exhaustive to give ready access to any desired information.

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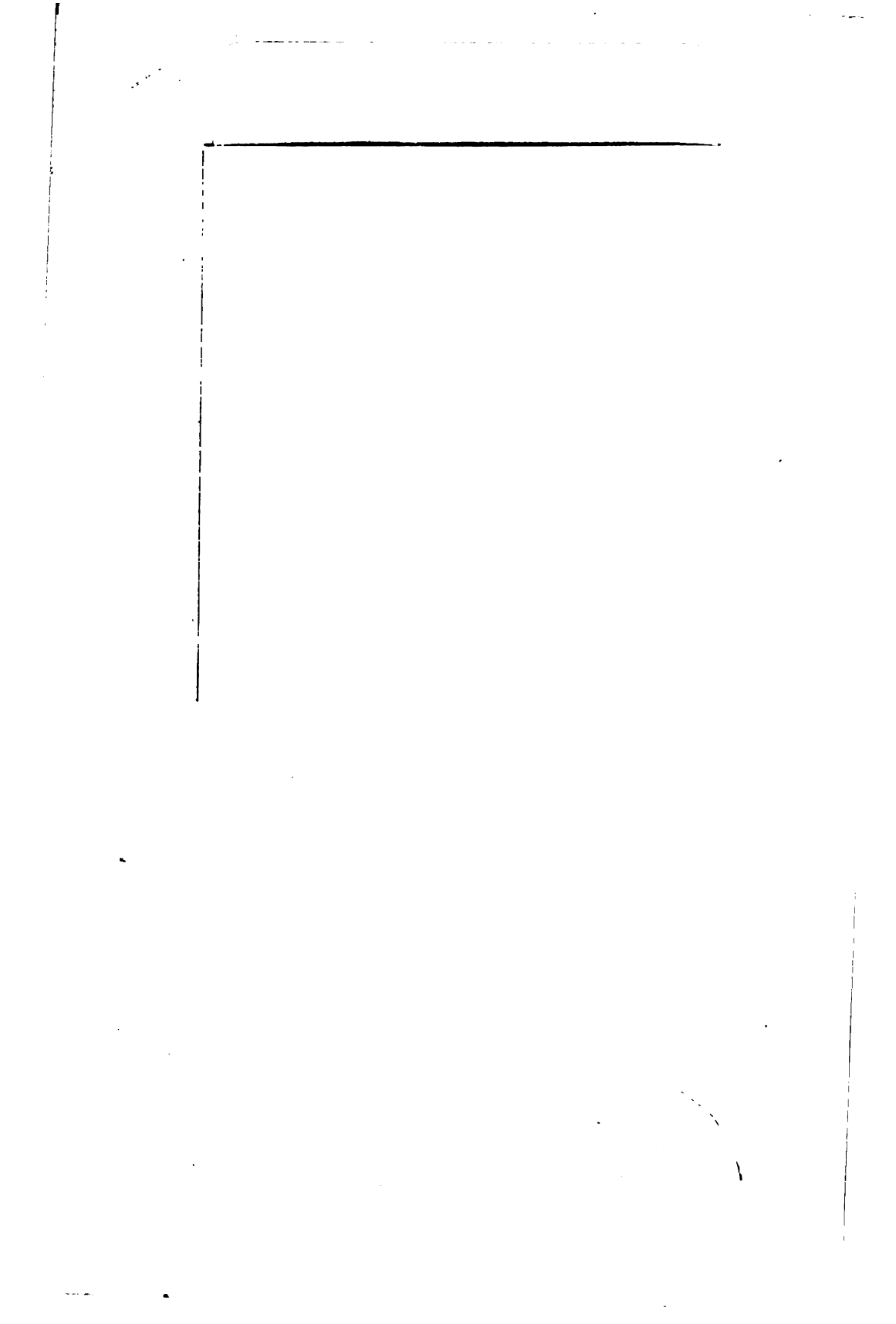
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